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14. ABSTRACT

The main aim of Phase 2, Part 1 is to perform a randomized double dissociative clinical trial to evaluate social fitness training. The primary goal of the social fitness training is to increase social resilience at the level of the individual, increase squad cohesion, and decrease loneliness given its known effects on depression and stress levels. Decreasing loneliness requires a change in social cognition and behavior and, with time, improvements in the quality of social relationships. The immediate goal of SAAT is to teach Soldiers: (a) new, more constructive and productive ways of thinking about other people (social perception and cognition), (b) new social skills to improve their social interactions with others; and (c) the importance of practicing these new skills and ways of thinking to improve their social resilience.

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Table of Contents

EXECUTIVE SUMMARY

The Social Awareness and Action Training (SAAT is designed to alter the social cognition, emotion, and behavior of Soldiers and Platoons. The implementation of the SAAT study at Fort Sill went smoothly thanks to the support provided by the Command Team at Fort Sill. Although the sample size is relatively small, analyses indicated that Soldiers indicated the specific benefits targeted in each branch of the clinical trial, suggesting that the improvements observed over the one-week training interval reflect the effects of the training rather than some general effect such as a placebo, response bias, or Hawthorne effect. The SF training is designed to change how Soldiers within a platoon think about and relate to one another, and such changes take effort and time to achieve a new equilibrium. Changes in norms and behavior often come at a short-term cost, as achieving this new equilibrium requires that the extant norms, behaviors, and relationships be challenged and changed – that is, it requires social reorganization. The immediate posttest showed that Social Fitness training improved knowledge and practice of appropriate social skills, improved the Soldiers' knowledge of and interpersonal relationships with platoon members, and improved platoon cohesion. Cultural Awareness training had no effect on these outcomes but rather had the predicted effects on knowledge of and decreased prejudice toward Afghanis.   Other variables of interest in Social Fitness training (e.g., depressive symptomatology, perceived stress, perceived social isolation, treatment of the weakest within the Platoon) were predicted to take longer to develop as the training is put into practice in daily interactions within platoons. These effects, therefore, will be tested at the 3-month follow-up and booster, scheduled at Fort Sill on 2 MAY. In addition, the SAAT intervention will be implemented for 32 platoons at JBLM the week of 3 JUN, and the 3-month follow-up and booster is being scheduled at JBLM in mid-SEP.

PROJECT MILESTONES

- Phase 1
    - Developed and tested Social Fitness and Cultural Awareness training in focus groups, Fort Bliss, July 2011.
    - Revised training material in light of focus group feedback
    - Implemented Pilot Test #1, Joint Base Lewis McChord, September 12-19, 2011.
        - Data analysis completed and pilot results reported, September 23, 2011.
    - Established a secure, confidential, reliable, and fast "Soldier to Statistics" computer network, database, and statistical analysis system to ensure the research outcomes are evaluated objectively and accurately in accordance with best practices in data management and statistics.
    - Revised training material in light of pilot test feedback
    - Presented the revised SAAT to LTC Dennis McGurk, LTC Jeffrey Thomas, and Dr. Amy Adler at the Walter Reed Army Institute for Research (WRAIR), November November 17, 2011; revised SAAT based on the feedback we received at WRAIR
    - Hired and trained former NCOs with training experience to adapt the language of SAAT to Soldiers and to serve as the lead Trainers for SAAT
    - Implemented Pilot Test #2, Fort Sill, March 12-16, 2012.
        - Data analysis completed and pilot results reported, March 18, 2012.

- o Revised training material further in light of second pilot test results and feedback.
- o Provided additional training to the former NCO's who would be overseeing the trainers hired for the next phase of the project.
- o Hired and trained 8 former NCOs with training experience, January 2013, for Phase 2
- Phase 2, Part 1
  - o The PI met with MG McDonald and his Chief of Staff, COL Dunn in September, 2012, to ask for brigades to participate in SAAT. (As originally proposed and funded, FORSCOM was to task brigades with this training.) MG McDonald agreed to provide two brigades.
  - o Achieved a test of Social Fitness training by implementing a randomized double dissociative clinical trial design
    - ▪ 16 Platoons from one brigade at Fort Sill, Feb 4-Feb. 8, 2013. The second brigade had scheduled for SAAT on Jan 28-Feb 1, 2013, but the brigade was deployed in late December, 2012. One Platoon from this brigade was available, however, and we trained the Platoon on Jan 28-Feb 1 to provide the (new) Trainers with in vivo experience with SAAT.
    - ▪ The 3-month follow-up training and assessment have been scheduled at Fort Sill for May 2, 2013. The one-year follow-up would be February, 2014.
    - ▪ LTC McGurk and the PI have also been in communication with MG Lanza from JBLM to secure additional Platoons to train. MG Lanza has agreed to provide 32 Platoons from June 3-7, 2013. This would make the 3-month follow-up training and assessment at JBLM to be scheduled in September, 2013, and the one-year follow-in June, 2014.
  - o At Fort Sill, we have tested the hypotheses described in our proposal that immediately post-training:
    - ▪ social resilience will be greater for Soldiers in the Social Fitness than the Cultural Awareness Condition,
    - ▪ performance will be better for Soldiers in the Social Fitness than the Cultural Awareness Condition,
    - ▪ outgroup prejudice (i.e., prejudiced attitudes toward Afghan people) will be diminished to a greater degree in the Cultural Awareness than the Social Fitness Condition, and
    - ▪ baseline characteristics of the Soldiers (e.g., baseline risk, age, military rank) will be related to post-training measures of social resilience and performance.
  - o Positioned the project for implementation of Phase 2 (Part 2: the 3-month follow-up training and assessment) and Phase 3 (the final assessment at approximately 12 months after the original training). In the original proposal, all Platoons were going to be deployed to combat. With the pending withdrawal from Afghanistan, most of the Platoons will not be deployed to combat.

Therefore, the follow-up assessments now serve different purposes depending on whether the troops are deployed or not.

- For troops who are *not* deployed, the 3-month and 12-month follow-up assessments will be used to test the effectiveness of social resilience training in response to the challenges and stressors to which Soldiers are normally exposed. We hypothesize that at 3-month and 12-month follow-up, relative to immediately post-training, (1) social resilience will be greater for Soldiers in the Social Fitness than the Cultural Awareness Condition, (2) performance will be better for Soldiers in the Social Fitness than the Cultural Awareness Condition, and (3) baseline characteristics of the Soldiers (e.g., baseline risk, age, military rank) will be related to follow-up measures of social resilience and performance.

- For troops who *are* deployed, the 3-month follow-up assessment will occur pre-deployment and will permit a test of the extent to which preparation for and anticipation of combat increases or decreases the effects of Social Fitness training. We hypothesize that at pre-deployment, relative to immediately post-training, (1) social resilience will be greater for Soldiers in the Social Fitness than the Cultural Awareness Condition, (2) performance will be better for Soldiers in the Social Fitness than the Cultural Awareness Condition, and (3) baseline characteristics of the Soldiers (e.g., baseline risk, age, military rank) will be related to 3-month follow-up measures of social resilience and performance. The 12-month follow-up assessment will occur post-deployment and will test whether the effects of social resilience training improve Soldiers' ability to respond to and recover from significant stressors endured while deployed. We hypothesize that at post-deployment, relative to immediately post-training, (1) social resilience will be greater for Soldiers in the Social Fitness than the Cultural Awareness Condition, (2) performance will be better for Soldiers in the Social Fitness than the Cultural Awareness Condition, and (3) baseline characteristics of the Soldiers (e.g., baseline risk, age, military rank) will be related to 12-month follow-up measures of social resilience and performance.

BODY

MAIN AIM OF THE CLINICAL TRIAL INTERVENTION PHASE

The main aim of Phase 2, Part 1 is to perform a randomized double dissociative clinical trial to evaluate social fitness training. The primary goal of the social fitness training is to increase social resilience at the level of the individual, increase squad cohesion, and decrease loneliness given its known effects on depression and stress levels. Decreasing loneliness requires a change in social cognition and behavior and, with time, improvements in the quality of social relationships. The immediate goal of SAAT is to teach Soldiers: (a) new, more constructive and productive ways of thinking about other people (social perception and cognition), (b) new social

skills to improve their social interactions with others; and (c) the importance of practicing these new skills and ways of thinking to improve their social resilience.

INTERVENTION DESIGN: FORT SILL (28 JAN – 1 FEB 2013)

Trainers arrived at Fort Sill on 19 FEB 2013 for final training working with one platoon the week of 21 JAN. The IT team arrived on 25 JAN to setup for data collection, and the PI did an in-brief of the Command Team at Fort Sill on 26 JAN. The double-dissociative randomized clinical trial was conducted 28 JAN – 1 FEB. Social Fitness (SF) and Cultural Awareness (CA) training programs were implemented at the level of the Platoon, with 16 Platoons from 4 Battalions in a single Brigade participating in eight hours of training. Random assignment was at the level of the Platoon, and Platoons were randomly assigned to Social Fitness or Cultural Awareness training. The flow of Platoons into experimental condition is shown in Figure 1.

Figure 1. CONSORT Flow Diagram for Social Awareness and Action Training (SAAT).

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                    ┌─────────────────────────┐
                    │ Enrolled:               │
                    │ 16 platoons;            │──────────┐
                    │ 247 Soldiers on roster  │          │
                    └─────────────────────────┘          ▼
                                │              ┌──────────────────────────┐
                                │              │ Excluded:                │
                                │              │ 0 platoons, 0 Soldiers   │
                                │              └──────────────────────────┘
                    ┌─────────────────────────┐
                    │ Randomized:             │
                    │ 16 platoons (PLs);      │
                    │ 247 Soldiers (Ss)       │
                    └─────────────────────────┘
```

Allocation/Pretest

Social Fitness	Cultural Awareness
--Received allocated intervention: 8 PLs, 118 Ss --Lost to follow-up: 16 Ss (attendance roster did not match Army database) --Completed pretest: 93 Ss --Did not take pretest: 9 Ss from various PLs.	--Received allocated intervention: 8 PLs, 129 Ss --Lost to follow-up: 8 Ss (attendance roster did not match Army database) --Completed pretest: 105 Ss --Did not take pretest: 16 Ss (1 entire PL of 11 Ss + 5 Ss from various PLs).

Follow-Up 1/Posttest

--Included: 8 platoons, 102 Ps --Completed posttest: 82 Ps --Did not take posttest: 20 Ps	--Included: 8 platoons, 121 Ps --Completed posttest: 105 Ps --Did not take posttest: 16 Ps

Follow-Up 2/Post-MRX

--Included (# of platoons, # of participants) --Lost to follow-up; discontinued (# of platoons, # of participants; reasons)	--Included (# of platoons, # of participants) --Lost to follow-up; discontinued (# of platoons, # of participants; reasons)

Follow-Up 3/Post-deployment

--Included (# of platoons, # of participants) --Lost to follow-up; discontinued (# of platoons, # of participants; reasons)	--Included (# of platoons, # of participants) --Lost to follow-up; discontinued (# of platoons, # of participants; reasons)

METHOD & RESULTS

1. Scales and measures.

The measures employed in this project were obtained primarily through a survey instrument implemented on a web-based interface modeled on the Global Assessment Tool (GAT) that is part of the Comprehensive Soldier and Family Fitness (CSF2) program. The Army database is used to secure demographic information (age, gender, race, education, rank, MOS, MRT status) and objective measures of job performance and physical and emotional health and well-being. Data from our survey and the Army database, including Soldiers' consent to have their data used for research purposes, are released to us de-identified for analytic purposes.

Measures of Social Resilience

Social resilience measures are those that index psychological characteristics (cognitive, affective, behavioral) that are influenced by and influence the perception of social connectedness at the individual level and social belonging and collective identity at the unit level.

1. *Perceived social fitness (PSF)*. Soldiers' degree of confidence in their ability to perform fifteen social behaviors that are indicative of social fitness (e.g., know how my actions affect how others feel, find a good way to solve an interpersonal conflict).
2. *Beliefs about social fitness (BSF)*. Degree to which Soldiers believe in the principles of social fitness (e.g., that social skills can be improved through practice).
3. *Showing social skills (SKILL)*. Frequency with which Soldiers have enacted seven social behaviors for which explicit instruction is provided in the Social Fitness training (e.g., addressing conflict; reading others' nonverbal behaviors).
4. *Loneliness (UCLA)*. Frequency of Soldiers' feelings of social isolation and connectedness without explicitly referring to terms such as "lonely" and "loneliness." Examples of the items are "There are people I feel close to," and "I feel part of a group of friends."
5. *Satisfaction with personal relationships (RS)*. Soldiers' satisfaction, on average, with their relationships with their (1) children, if relevant (*RS_CHILD)*, (2) parents, if relevant (*RS_PRNT*), (3) friends (*RS_FRD*), and (4) relatives *(RS_RELTV).*
6. *Satisfaction with Platoon relationships (RS_PL)*. How well Soldiers know people in their Platoon and how satisfied they are with their relationships with people in their Platoon.
7. *Depressive symptoms (PHQ).* Frequency with which Soldiers experienced depressive symptoms over the last week. One of the items probes *suicidal ideation* (PHQ9) and is examined separately.
8. *Perceived stress (PSS)*. How often, in the last week, Soldiers felt in control or capable of handling stress in their lives.
9. *Perspective-taking (PTS).* Degree to which Soldiers endorse perspective taking skills such as attempting to understand another person's point of view.
10. *Hostility (CMHO).* The "Aggressive Responding" subscale of the Cook–Medley Hostility Scale is used to assess whether Soldiers endorse statements such as, "I can be friendly with people who do things which I consider wrong," and "I have at times had to be rough with people who were rude or annoying."

11. *Empathy (EMP).* Degree to which Soldiers experience concerned feelings about others' misfortunes.
12. *Interaction anxiety (IAS-S).* Degree to which Soldiers feel anxious in social situations.
13. *Mood (MOOD).* Mood during the past week, from extremely unpleasant to extremely pleasant.
14. *Sleep quality (SLEEP).* Overall sleep quality during the past week, from very good to very bad.
15. *Catastrophizing (CATA).* Degree to which Soldiers believe that bad things that happen to them are worse than they actually are.
16. *Generalized trust (TRUST).* Degree to which Soldiers believe that, in general, people can be trusted and try to be fair.
17. *Social integration (CHILD, RELAT, FRIEND, CHURCH).* Number of children, close relatives, and friends, and religious group affiliation (yes/no).
18. *Partner status (RELSTAT).* Whether currently in a serious relationship.
19. *Marital status (MARSTAT, MAR1).* Current marital status (5 categories); married or living with someone in marital-like relationship (versus all other categories).
20. *Marital satisfaction (MS).* The quality of the marriage relationship.
21. *Communication with friends and family (COM_FRQ_PHONE/ONLINE; COM_SAT_PHONE/ONLINE).* Frequency of communication with friends and family by phone and by internet, and degree of satisfaction with each type of communication.

Measures of Performance

Performance measures are those that index belief in, endorsement of, and behavioral support for Army values and goals.

1. *Platoon cohesion and support (PCS).* Soldiers' degree of agreement with statements about cohesion with and support by fellow Platoon members and leaders.
2. *Platoon conflict (PCON).* Frequency with which Soldiers observe conflictual behaviors in their Platoon (e.g., arguments, rudeness).
3. *Organizational (Platoon) trust (OT).* Degree to which Soldiers believe that their fellow Platoon members and leaders can be trusted to respect, value, and care for them.
4. *Leadership quality (MLQ):* Soldiers' ratings of the frequency with which their first-line supervisor exhibits a supportive leadership style (e.g., spends time teaching and coaching, expresses satisfaction when I meet expectations).
5. *Negative leadership behaviors (LB_NEG):* Frequency with which Soldiers' first-line supervisor exhibits unsupportive behaviors (e.g., embarrasses Platoon members in front of other).
6. *Collective Platoon efficacy (CPE).* Soldiers' degree of confidence that members of their Platoon are collectively able to manage situations that commonly arise in Platoons (e.g., resolve conflict, support each other during stress, develop a strong identity).
7. *Perceived organizational support (POS).* Perceptions of the Army's support of and care for them individually.
8. *Organizational commitment (OCOM).* Intensity of Soldiers' feelings of connection and belonging in the Army.

9. *Organizational citizenship behaviors (OCB).* Soldiers' evaluation of the likelihood that members of their Platoon will exhibit prosocial behaviors which are good for the life of the group rather than the individual.
10. *Counterproductive work behaviors (CWB).* Soldiers' evaluation of the likelihood that members of their Platoon will exhibit negative behaviors toward each other.
11. *Treatment of weakest link (TWL).* Soldiers' belief that social rejection and withholding help for poorly performing members is justified.
12. *Hardiness (Hard).* Soldiers' beliefs that their performance matters to the Platoon, and that they are contributing in an important way to the Platoon's mission.
13. *Malingering beliefs (MAL_BELIEFS).* Soldiers' belief that it is acceptable to go on sick call for minor medical problems and to avoid unpleasant or difficult duties.
14. *Intent to re-enlist (ITRE).* At baseline and at 3- and 12-month follow-up, Soldiers degree of confidence that they will stay in versus leave the Army upon completion of their current obligation.

Objective measures of performance.
15. *Physical fitness.* Results of physical fitness tests from the Army database.
16. *Drug screen.* Drug screen results from the Army database.
17. *Medical visits (i.e., number and nature, including ICD-9 psychiatric codes).*
18. *Medical profile.* Information on soldiers' physical profile (i.e., PULHES).
19. *Impulsive behaviors (i.e., Adverse Actions).* Information on drug and alcohol reprimands in Soldiers' files.
20. *Suicide.* Suicides and attempts from the Army database.
21. *MRX Platoon-level performance metrics.* For deploying troops, at post-MRX (pre-deployment), MRX performance metrics are supplied by the Platoon officer for each of his Soldiers.
22. *Selection for Special Status.* At baseline and at 12-month follow-up/post-deployment, whether Soldiers were selected for special status awards such as nomination to the Sergeant Audie Murphy Club; from Army database.
23. *Promotions.* At baseline and at 12-month follow-up/post-deployment, whether Soldiers were promoted; from the Army database.
24. *Awards.* At baseline and at 12-month follow-up/post-deployment, whether Soldiers received expert infantry and airborne/air assault awards; from the Army database.

Measures of health & well-being.
25. *Self-rated health (HEALTH, EMOTION).* Soldiers' ratings of their (1) physical and (2) emotional health, from poor to excellent.
26. *Bodily pain (PAIN).* Intensity of pain experienced in the last week and the degree to which pain has interfered with normal work.
27. *Alcohol misuse (ALCOHOL).* Soldiers' belief that they have over-consumed alcohol in the past week, and that their alcohol consumption is problematic.
28. *Vitality (VITALITY).* How energetic Soldiers felt during the past week.
29. *PTSD symptoms (PTSD, PTSD_S).* For Soldiers who have previously been deployed, the 17-item PTSD Checklist – Military version (PCL-M) was administered regarding symptoms subsequent to a stressful military experience. All Soldiers complete a 4-item

version of the PTSD scale that asks the degree to which ANY frightening, horrible, or upsetting experience in the past month has caused four symptoms.

30. *Life satisfaction (LS).* Soldiers' satisfaction with their life as a whole.
31. *Benefit-finding (BENEFIT).* Degree to which Soldiers feel they have benefited from their military experiences (e.g., confidence in abilities, pride in accomplishments).

Measures of Cultural Awareness

These measures were employed to evaluate the effectiveness of Cultural Awareness training and to determine the unique effects of Cultural Awareness versus Social Fitness Training.

1. *Knowledge about Afghanistan / Cultural Awareness (CA).* Soldiers' knowledge about different aspects of Afghani culture, economy, and religion that are taught in the Cultural Awareness Condition.
2. *Outgroup prejudice*. Soldiers' perceptions of the warmth and competence of Afghani (IGOG_AFW, _AFC) and American (IGOG_USW, _USC) people. Lower ratings of Afghani relative to American people signifies greater outgroup prejudice on dimensions of warmth and competence, respectively (IGOG_WDIF, IGOG_CDIF).

Measures of Stress Exposure

1. *Stressful life events (LE_SUM)*. At 12-month follow-up (post-deployment), whether Soldiers have experienced each of 17 life events, including natural disasters, the death of someone close to them, divorce, legal problems, and health threats.
2. *Previous deployment (PD)*. At baseline, how many times Soldiers have been deployed, and how many times to a combat zone.
3. *Combat experiences (CE)*. At post-test (for those previously deployed to a combat zone) and at 12-month follow-up (for those just returned from deployment to a combat zone), how many of 29 experiences Soldiers underwent in their most recent deployment (e.g., was attacked or ambushed, was directly responsible for the death of an enemy combatant, witnessed violence within the local population).
4. *Harassment (Harass)*. At pre-test, and at 3- and 12-month follow-up, the frequency with which Soldiers felt the leaders or other members of their Platoon were overly critical, unfair, and discriminatory of them.
5. *Childhood trauma (CT)*. The frequency with which Soldiers experienced neglect, physical violence, and emotional abuse during their childhood and teenage years.

Measures of Disposition

1. *Global Assessment Tool (GAT).* Soldiers' scores on the GAT were used to assign high-versus low-risk status to each Soldier at baseline. Those in the bottom 20% of scores on the GAT were deemed at high risk of negative outcomes.
2. *Personality (BIG5S_EX, _A, _O, _C, _ES)*. At post-test and 12-month follow-up, the degree to which Soldiers can be characterized, respectively, as (1) extraverted, (2) agreeable, (3) open to new experiences, (4) conscientious, and (5) emotionally stable.

Demographic Measures

At baseline, TechWerks will access the Army database to obtain data on:

1. *Age.*
2. *Gender.*
3. *Education.* Completion of a high school diploma was contrasted with no diploma.
4. *Rank.* These data are dichotomized to distinguish between NCO's and non-NCO's.
5. *Military Occupational Specialty (MOS)*
6. *Master Resilience Training (MRT).* Soldiers with MRT training are distinguished from those without.

SAAT Evaluation Measures

1. *Consent (CONSENT).* For Army purposes, all data are used to determine training efficacy. For research purposes, only those data are used that Soldiers have agreed to release. At each assessment, Soldiers were asked whether they are willing to release their data for research purposes.
2. *Satisfaction with training (SWT).* Soldiers are asked at post-test how satisfied they were overall with the SAAT training.
3. *Attendance (ATTEND_SUM).* Number of attended sessions. Platoon leaders verified the attendance of each Platoon member at each training session, and provided reasons for late arrivals and absentees.
4. *Instructed response items (IR_DG, IR_RATIO).* Number and percent incorrect responses to items with instructed responses.
5. *Outliers (OUTLIER_SUM).* Number of scales on which the individual's values exceed 2.5 SDs from the mean.
6. *Intervention adherence measurement.* Training sessions are audiotaped to permit an evaluation of the Trainer's adherence to the training manual for the intervention. Following the intervention, two judges independently rate the adherence of each Trainer to the training manual for each session. Judges rated the Trainer's coverage of each topic in each training section on a 3-point scale (1 = material not covered, 2 = material covered partly or poorly, 3 = material covered well), and the sum of these scores across topics within a session constituted a measure of *Overall Training Adherence*. In addition, judges rated each training session in terms of "pacing and efficient use of time," "teaching effectiveness (organized)," and "interpersonal effectiveness (engaging/motivational)," using a 3-point scale (1 = poor, 2 = good, 3 = excellent), and the sum of these scores served as the measure of *Overall Session Quality*. Inter-rater reliability is determined to evaluate the accuracy and reliability of the scoring of the training sessions.

A complete description of each scale is included in Appendix E, and the complete questionnaires are also appended (see Appendix F).

2. Participants

The flow of all Soldiers and Platoons into the SF and CA conditions is summarized in Figure 1, above. Figure 2, below, illustrates the implementation of the random assignment of 16 Platoons from one Company to experimental condition (SF versus CA Condition), to trainers/rooms, and to time of day.

Figure 2. Platoon Assignment to Condition, Hour, and Trainer (Room)

Training of 16 platoons

Room #	Monday				Tuesday				Wednesday				Thursday				Friday			
	0800-0950	1000-1150	1300-1450	1500-1650	0800-0950	1000-1150	1300-1450	1500-1650	0800-0950	1000-1150	1300-1450	1500-1650	0800-0950	1000-1150	1300-1450	1500-1650	0800-0950	1000-1150	1300-1450	1500-1650
124	Platoon #1	Platoon #5	Platoon #9	Platoon #13	Platoon #1	Platoon #5	Platoon #9	Platoon #13	Platoon #1	Platoon #5	Platoon #9	Platoon #13	Platoon #1	Platoon #5	Platoon #9	Platoon #13	Platoon #1	Platoon #5	Platoon #9	Platoon #13
144	Platoon #2	Platoon #6	Platoon #10	Platoon #14	Platoon #2	Platoon #6	Platoon #10	Platoon #14	Platoon #2	Platoon #6	Platoon #10	Platoon #14	Platoon #2	Platoon #6	Platoon #10	Platoon #14	Platoon #2	Platoon #6	Platoon #10	Platoon #14
125	Platoon #3	Platoon #7	Platoon #11	Platoon #15	Platoon #3	Platoon #7	Platoon #11	Platoon #15	Platoon #3	Platoon #7	Platoon #11	Platoon #15	Platoon #3	Platoon #7	Platoon #11	Platoon #15	Platoon #3	Platoon #7	Platoon #11	Platoon #15
151	Platoon #4	Platoon #8	Platoon #12	Platoon #16	Platoon #4	Platoon #8	Platoon #12	Platoon #16	Platoon #4	Platoon #8	Platoon #12	Platoon #16	Platoon #4	Platoon #8	Platoon #12	Platoon #16	Platoon #4	Platoon #8	Platoon #12	Platoon #16

3. Data Preparation and Analytic Strategy

Preparation of an analytic sample was based first on individuals on the attendance roster who could be identified in the Army database. As shown in the CONSORT chart in Figure 1, of the 247 Soldiers on the attendance roster, 24 were lost to pretest and follow-up because they were not identifiable in the Army database (16 in the SF condition, 8 in the CA condition); 36 did not take the posttest (20 in the SF condition, 16 in the CA condition), and 2 Soldiers who took either the pre- or post-test could not be matched with the attendance roster, leaving an initial working sample of 221 identifiable Soldiers.

Pretest data were available from 198 Soldiers, 93 in the SF condition, and 105 Soldiers in the CA condition. Posttest data were available from 187 Soldiers, 82 in the SF condition and 105 in the CA condition. Pretest and post-test data were individually subjected to exclusionary criteria based on data quality. These processes and criteria are outlined in Appendix A.

Data analysis strategies are explained in detail in Appendix A. To summarize, the data were analyzed with multilevel models (Soldiers nested in Platoons, Companies, and Battalions; at Fort Sill, Platoons were synonymous with Companies because each Company was represented by a single Platoon) using one between-subject factor (Condition: Social Fitness vs. Cultural Awareness) and one within-subject factor (Time: Pretest vs. Posttest). The cross-level interaction between Condition and Time signifies the effect of the intervention and is plotted graphically. Appendix D summarizes ancillary analyses conducted to determine whether the effects of training were robust to statistical control for demographic covariates and baseline differences between the SF and CA Conditions.

Effect sizes (Cohen's *d)* are calculated as standardized mean differences between pre- and post-training scores for the Social Fitness and the Cultural Awareness Conditions, and are transformed so that positive effect sizes reflect positive resilience and performance changes (e.g., reduced loneliness, increased Platoon cohesion).

Moderator analyses test the significance of the three way interaction between *Time, Condition,* and *Moderator*. Each significant three-way interaction is accompanied by separate plots for each experimental condition and a statistical test of the two-way interaction in each condition to identify the source of differences in the effect of the training.

Finally, analyses for select outcomes were repeated at the Platoon level, including main effects of the training on Platoons as a whole, and tests of Platoon level moderators of training effects.

4. Results

The average time to complete the surveys among consenting Soldiers was 28.6 (*SD* = 7.6) minutes for the pretest and 20.3 (*SD* = 5.1) minutes for the posttest. A repeated measures analysis of variance confirmed that the briefer post-test (i.e., fewer survey questions) was quicker to complete, *p* < .001, and that the SF and CA groups did not differ in survey completion

time (p> .3) or the difference between the pre- and post-test survey time (p > .9). There were no technical issues in online survey administration that couldn't be fixed immediately, and the University of Chicago and Techwerks staff worked flawlessly as a team.

a. Individual Level of Analysis

Consent and Careless Responding

Baseline.

Consent. We evaluated the Soldiers' pre-test consent to have their data used for research purposes. Of 172 identifiable Soldiers who provided reliable pre-test data, 154 (89.5%) consented to the use of their data for research purposes. The consent rate did not differ between the SF (90.0%) and CA (89.1%) conditions, chi-square(1) = 0.035, *p* > .8. This consent rate suggests a receptive attitude toward the training on the part of most Soldiers in both training Conditions.

Non-consenting Soldiers (N=18) differed from consenting Soldiers (N=154) at baseline across a broad swath of social resilience and performance measures, including lower levels of perceived social fitness, organizational citizenship behaviors, Platoon cohesion, organizational commitment, perspective-taking, and satisfaction with training, and higher levels of loneliness, hostility, perceived stress, and interaction anxiety. Results are tabulated in Table B1 in Appendix B.

Careless Responding. Soldiers with careless responding rates that met predefined exclusionary criteria had their data excluded from analysis as described in Appendix A. Of 175 identifiable Soldiers who consented to the use of their pre-test data, 21 (12.0%) had their data excluded. The exclusionary rate did not differ between the SF (13.3%) and CA (10.9%) conditions, chi-square(1) = 0.235, *p* > .6.

Soldiers whose responses at baseline met criteria for exclusion differed from those whose data were deemed valid such that excluded cases were more likely to be non-NCO's, had lower levels of education, completed the surveys more quickly, had poorer scores on several measures of social fitness (lower perspective-taking and listening skills; higher loneliness), were more likely to have had combat experience, but were less stressed, had higher levels of collective connectedness and reported better treatment of weak Platoon members. These findings are tabulated in Table B2 in Appendix B.

Training effects.

Generally, the analysis of the effects of consent and careless responding indicated that Soldiers who are uninterested in the training also benefit the least from exposure to it. Social fitness, like physical fitness, appears to be more effective when Soldiers embrace and practice the training.

Consent. Effects of the training did not differ substantively when comparing consenting and non-consenting Soldiers with valid data. Exceptions are noted in Appendix C. In brief, when consenting and non-consenting Soldiers differed, the pattern of effects showed a reversal in the non-consenting group such that social skills and empathy increased in the CA relative to the SF condition, and hostility decreased in the CA relative to the SF condition. These findings indicate

that including data from non-consenting Soldiers, at least in some instances, dampens the magnitude of training effects observed.

Careless Responding. Effects of training showed very few differences between careless (i.e., excluded) and reliable cases as noted in Appendix C. Briefly, significant three-way interactions for beliefs in social fitness and depressive symptoms (Condition*Time*Exclusionary Status) was attributable to a greater increase in beliefs in social fitness, and a greater decrease in depressive symptoms, in excluded than retained cases in the SF condition. In addition, a significant three-way interaction for ratings of Afghani warmth was attributable to lower ratings of Afghani warmth at post-test in excluded than retained cases.

FINAL SAMPLE SIZE: After applying exclusionary criteria for unreliable responders as described in Appendix A, the final sample size for the main analyses in this report consisted of **122** consenting Soldiers with reliable data at pre- and post-test: **53 Soldiers in 7 Platoons in the SF Condition, and 69 Soldiers in 8 Platoons in the CA Condition.**

Sample Characteristics.

In the final sample, the mean age was 25.2 (*SD*=5.0), 9.4% were female, 97.5% had a high school diploma, 23.8% were NCOs, 45% had been previously deployed, and 50.8% were married or living with a partner in a marital-like relationship. None of these descriptive variables differed between the SF and CA conditions, *p*'s > .05. Two Soldiers had completed MRT training, one in the SF and one in the CA condition.

Table 1. Sample characteristics by CA and SF condition.

	CA (N=69)	SF (N=53)
Age	25.1 (*SD*=5.3)	25.3 (SD=4.8)
Female (percent)	4 (5.8%)	5 (9.4%)
High-school diploma	67 (97.1%)	52 (98.1%)
Married or living with partner	34 (49.3%)	28 (52.8%)
NCO status	14 (20.3%)	15 (28.3%)
MRT	1 (1.4%)	1 (1.9%)
Previous deployment	27 (39.1%)	28 (52.8%)
Number of previous deployments to combat zone	0.70 (SD=1.11)	0.98 (SD=1.46)

Baseline differences between the CA and SF conditions.

Analyses revealed that Soldiers in the SF condition were more likely to have been deployed to help Afghani security forces, had lower levels of support from fellow Soldiers in their Platoon, were more educated, were part of smaller Platoons, were higher on endorsement of malingering, and less likely to have been deployed to combat (see Table B3, Appendix B, for significant bivariate associations between predictors and condition). When the differing baseline covariates were simultaneously entered in a logistic regression, only Platoon size and

deployment to help Afghanistan forces significantly predicted being in the SF as opposed to the CA conditions, and were therefore included as covariates in analyses.

Descriptive Statistics at the Individual-Level: Social resilience and performance measures (N=122)

Descriptive statistics for the pre-test levels (*_1) of the social resilience and performance measures that are included in this report are provided below.

	mean	sd	median	min	max
big5s_a	4.55	1.12	4.50	1.02	7.00
big5s_c	5.58	1.21	6.00	1.45	7.00
big5s_es	5.02	1.49	5.00	1.00	7.00
big5s_ex	4.26	1.49	4.00	1.00	7.00
big5s_o	5.49	1.21	5.50	1.91	7.00
bsf_1	4.04	0.78	4.00	1.67	5.00
ca_1	1.97	1.13	2.00	0.00	5.00
ce	2.74	4.77	0.00	0.00	17.15
ce_aid	0.11	0.41	0.00	0.00	2.00
ce_comb	0.10	0.35	0.00	0.00	2.00
ce_death	0.97	1.76	0.00	0.00	6.00
ce_fight	0.70	1.59	0.00	0.00	8.00
ce_thre	0.80	1.48	0.00	0.00	6.00
ce_viol	0.18	0.50	0.00	0.00	2.00
cmho_ar_1	0.52	0.19	0.56	0.11	1.00
cpe_1	3.46	0.96	3.50	1.00	5.00
ct	1.44	0.69	1.13	1.00	3.97
ct_ea	1.39	0.80	1.00	1.00	4.00
ct_en	1.65	1.07	1.00	1.00	5.00
ct_pa	1.23	0.69	1.00	1.00	5.00
ct_pn	1.51	0.81	1.00	1.00	5.00
cwb_1	2.16	0.75	2.17	1.00	3.83
emotion	3.11	1.22	3.00	1.00	5.00
emp_1	3.47	0.81	3.50	1.00	5.00
haras	1.95	0.87	1.71	1.00	4.00
hard_1	3.63	0.88	3.50	1.33	5.00
health	3.37	1.01	3.00	1.00	5.00
ias_s_1	2.61	0.82	2.67	1.00	4.67
igog_afc_1	3.01	0.93	3.00	1.00	5.00
igog_afw_1	2.72	0.89	3.00	1.00	5.00
igog_cdif_1	0.46	0.99	0.33	-2.00	3.33
igog_usc_1	3.47	0.85	3.50	1.00	5.00
igog_usw_1	3.03	0.84	3.00	1.00	5.00
igog_wdif_1	0.31	1.02	0.00	-3.00	3.00
lb_neg_1	2.41	1.21	2.33	1.00	5.00

	mean	sd	median	min	max
mlq_1	2.25	0.94	2.35	0.00	4.00
mlq_av_1	2.03	1.01	2.00	0.00	4.00
mlq_ta_1	2.28	1.09	2.50	0.00	4.00
mlq_tf_1	2.32	1.05	2.38	0.00	4.00
mood_1	6.34	2.28	7.00	1.00	10.00
ocb_1	2.85	0.74	2.90	1.00	4.00
ocom_1	3.27	1.14	3.25	1.00	5.00
ot_1	3.39	0.98	3.40	1.00	5.00
pain	0.06	1.83	-0.48	-2.18	5.40
pcon_1	2.60	0.84	2.50	1.00	5.00
pcs_1	3.19	0.92	3.29	1.14	5.00
pd_combat_1	0.82	1.28	0.00	0.00	8.00
pd_help	0.11	0.31	0.00	0.00	1.00
pd_overall	0.87	1.33	0.00	0.00	8.00
phq_1	0.65	0.64	0.56	0.00	2.65
phq9_1	0.10	0.35	0.00	0.00	2.00
pos_1	2.49	1.19	2.33	1.00	5.00
psf_1	3.78	0.78	3.90	2.07	5.00
pss_1	2.31	0.85	2.25	1.00	4.75
pts_1	3.83	0.67	3.75	1.42	5.00
ptsd	2.01	0.95	1.76	1.00	4.59
ptsd_s	0.23	0.33	0.00	0.00	1.00
rs_1	4.13	0.79	4.33	2.00	5.00
rs_pl_1	3.27	0.93	3.00	1.00	5.00
size	16.80	3.50	16.00	10.00	22.00
skill_1	2.01	0.55	2.00	0.29	3.00
swt	4.24	0.85	4.00	2.00	5.00
trainer_pair	2.43	1.09	2.00	1.00	4.00
twl_1	4.33	0.81	4.50	2.00	5.00
ucla_1	17.89	6.07	17.50	9.00	31.00
vitality_1	3.53	1.17	3.50	1.00	6.00

Intra-class coefficients. Null multilevel models revealed that for most outcomes, variance at level 1 (time: pre, post) and level 2 (individual Soldiers) combined to account for more than 90% of total variance. Level 1 (time) variance exceeded 25% of total variance for beliefs in social fitness, perceived social fitness, and social skill practice -- outcomes hypothesized most likely to exhibit short-term pre-post changes. Social resilience measures for which Level 1 variance exceeded 25% of total variance include interpersonal anxiety, perspective-taking, Platoon relationship satisfaction, personal relationship satisfaction, empathy, and hostility. Level 1 variance also exceeded 25% of total variance for performance measures indicative of Platoon functioning: Platoon conflict, collective Platoon efficacy, treatment of the weakest link,

organizational citizenship behaviors, and counterproductive work behaviors. Level 1 variance accounted for 80.4% of total variance in cultural knowledge. Level 2 (individual) variance exceeded 50% for all social resilience and performance measures, but was negligible for cultural knowledge. Level 3 (Platoon) variance accounted for no more than 8% of total variance for all outcomes except cultural knowledge, which approached 20%. Level 4 (battalion) variance approached zero for all outcomes.

Hypothesis Testing: Social Resilience

We first examined whether Social Fitness Training increases social resilience at the level of the Soldier and at the level of the platoon. These outcomes take training and time to develop, so the focus on the immediate posttest is on Soldier beliefs about and motivation to pursue social fitness. The relatively small sample size from Fort Sill raises issues of Type II error rates.

Did Social Fitness training promote beliefs about and an increased pursuit of social fitness? As shown below, beliefs about social fitness increased over time in both training conditions but to a somewhat greater extent in the SF than the CA conditions, indicating the Social Fitness training may have been effective in altering Soldiers' attitudes toward social fitness and its importance. *The effect size of Social Fitness training on social fitness beliefs at post-test was moderate to large in size at d=0.46*, and effect size for the interaction test – which isolates the specific effects of SF training, was 0.24 (a moderate effect size).

Beliefs about social fitness as a function of time and experimental condition.

Coefficients:
Condition = -0.07 *p* >.5
Time = 0.12, *p* >.1
Condition*Time = 0.20, *p* = .08
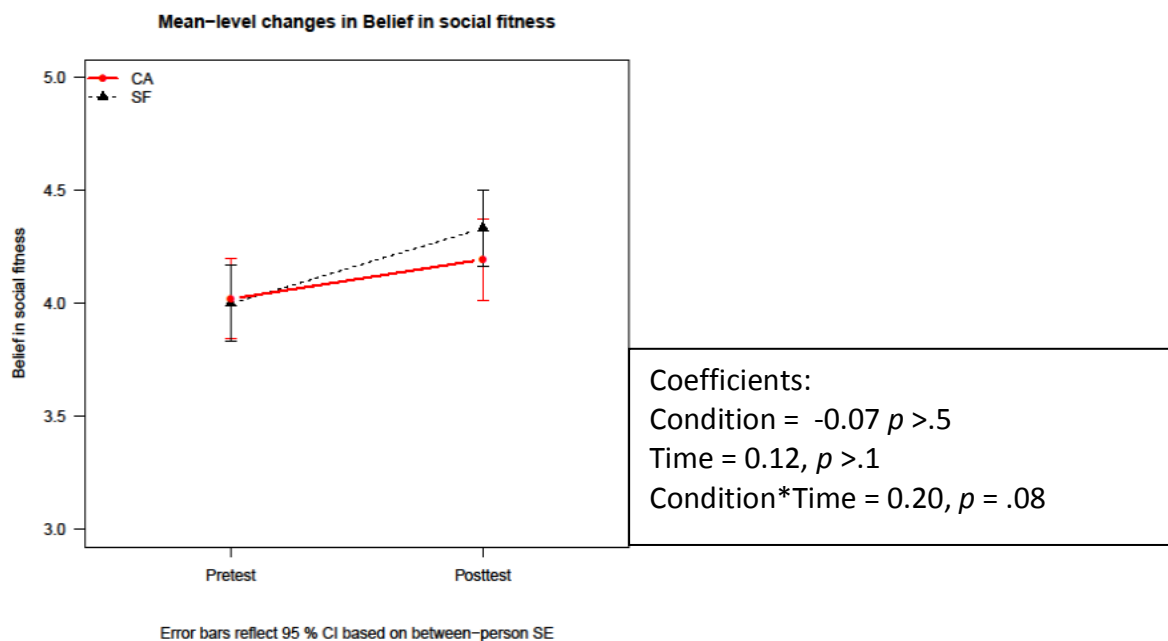
Beliefs about social fitness: Effect sizes as a function of experimental condition.

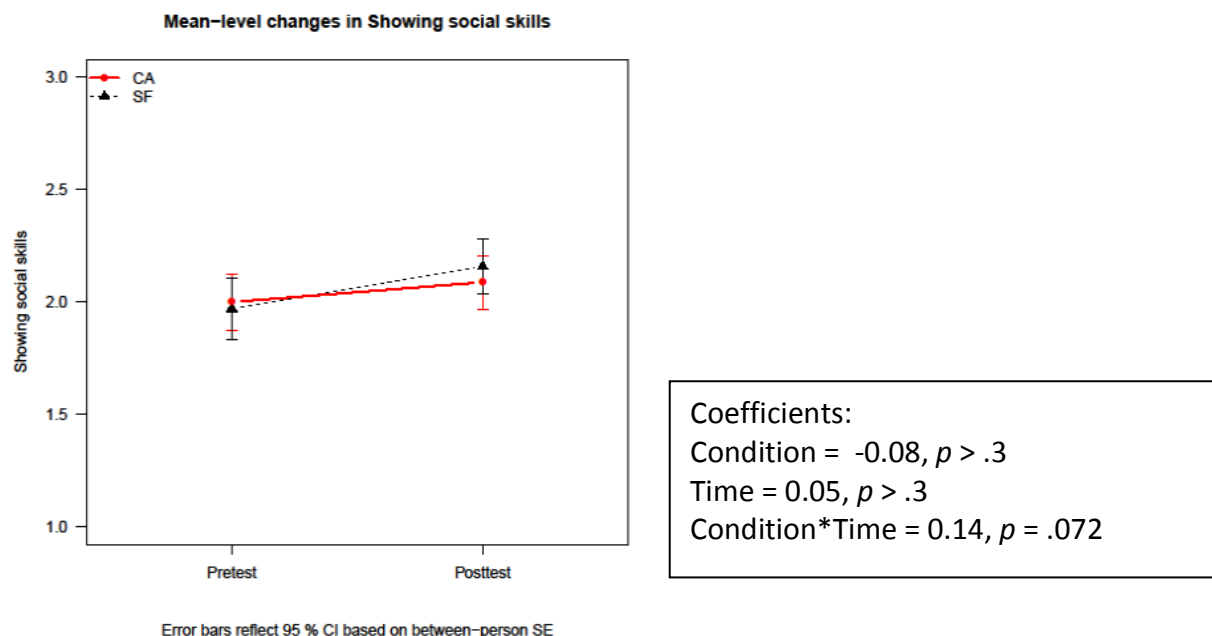## Standardized mean-level differences between T1 and T2: Belief in social fitness
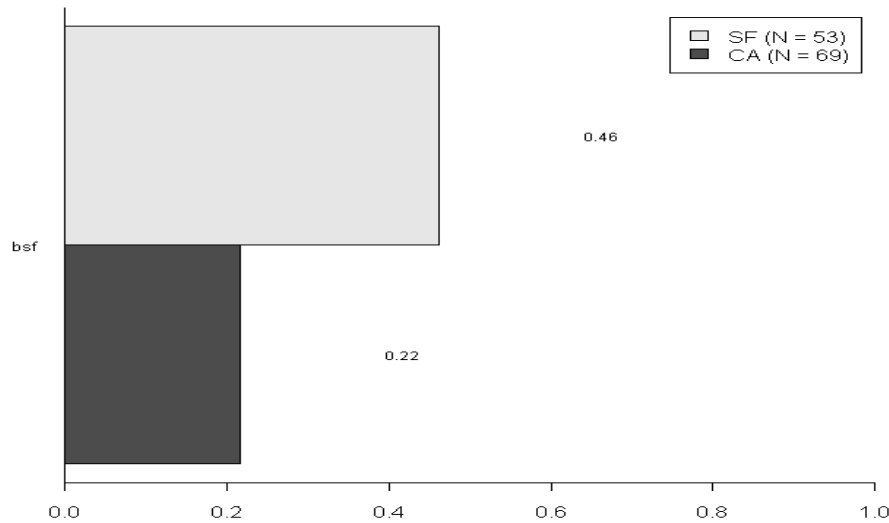
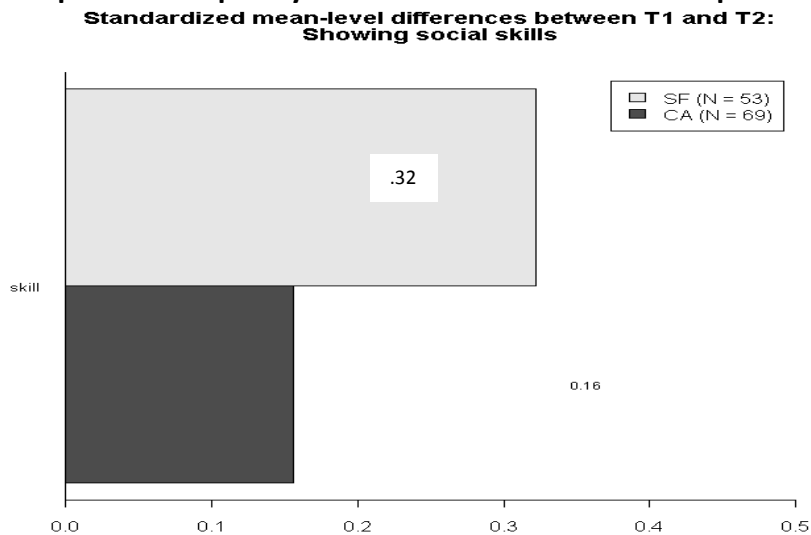Positive effect sizes = positive change in psychological terms

NOTE: A positive score means an increase and a negative score means a decrease in social fitness beliefs.

Importantly, Social Fitness Training also appeared to have had a moderate effect on the frequency with which the Soldiers practiced social skills. As shown in the figure below, Soldiers in the Social Fitness Training Condition were somewhat more likely post-training to use the queried social skills than Soldiers in the Cultural Awareness Training. The effect size for Social Fitness Training on social skill practice at post-test was sizeable for a large-scale group intervention, d=0.32, and the interaction test revealed an effect size specific to SF training that was moderate (.16).

Social skill practice frequency as a function of time and experimental condition.

Coefficients:
Condition = -0.08, $p > .3$
Time = 0.05, $p > .3$
Condition*Time = 0.14, $p = .072$

Error bars reflect 95 % CI based on between−person SE

Social skill practice frequency: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Showing social skills
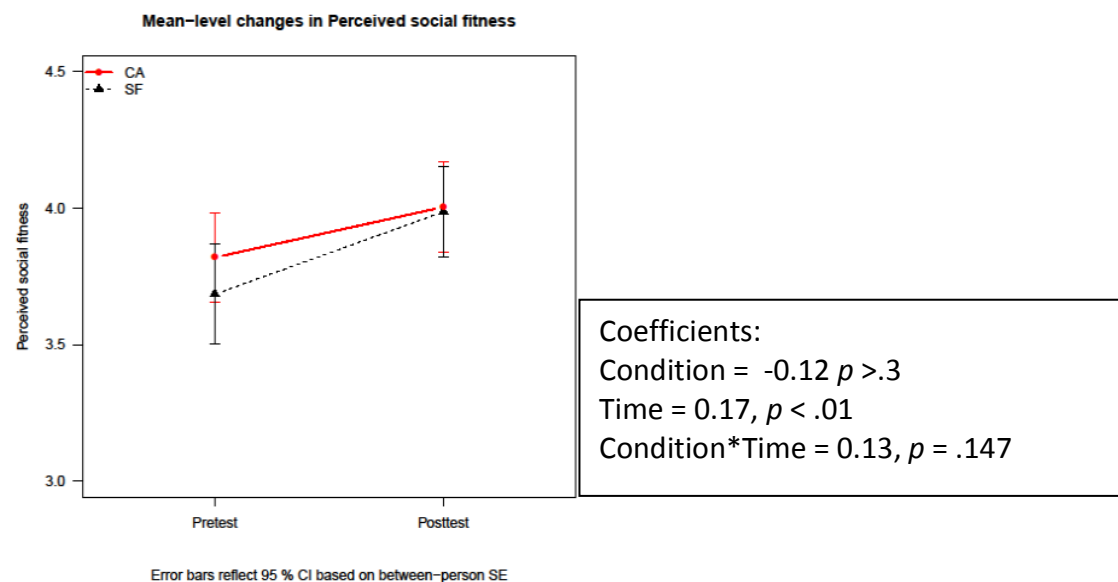
Legend: SF (N = 53), CA (N = 69)

.32

0.16

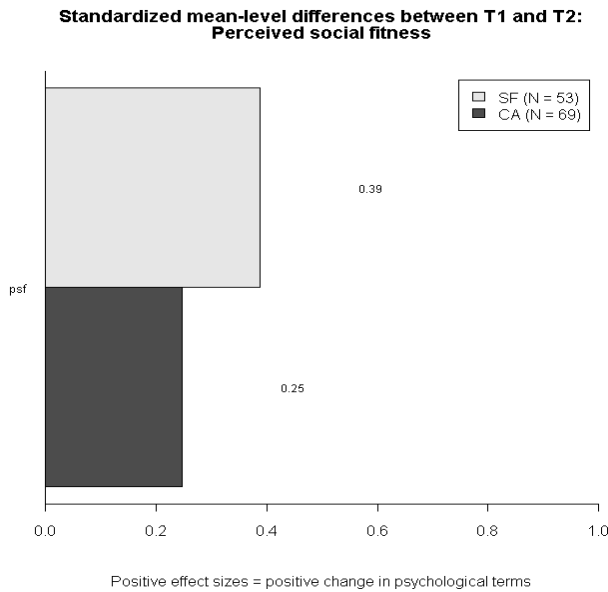Positive effect sizes = positive change in psychological terms

NOTE: A positive score means an increase and a negative score means a decrease in social skill practice frequency.

Both arms of the clinical trial were designed to improve the Soldier's understanding of others, with Cultural Awareness focused on reducing outgroup prejudice and Social Fitness training focused on improving social cognition, interpersonal relationships, platoon cohesion, and resilience to isolation and social stressors. Analyses of the Soldiers' perceptions of their social fitness revealed that both arms of SAAT training increased perceived social fitness, with Social Fitness training producing somewhat larger increases in perceived fitness than the Cultural Awareness training (net effect size = 14; see figures below).

**Perceived social fitness as a function of time and experimental condition.**

Mean-level changes in Perceived social fitness

Coefficients:
Condition = -0.12 p >.3
Time = 0.17, p < .01
Condition*Time = 0.13, p = .147

Error bars reflect 95 % CI based on between-person SE

Perceived social fitness: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Perceived social fitness

SF (N = 53)
CA (N = 69)

0.39

psf

0.25

0.0   0.2   0.4   0.6   0.8   1.0

Positive effect sizes = positive change in psychological terms

NOTE: A positive score means an increase and a negative score means a decrease in perceived social fitness.

Social Fitness Training did not simply increase ratings of quality or fitness. For instance, Social Fitness Training did not affect the Soldier's ratings of their own social fitness any more than did Cultural Awareness Training. Moreover, Social Fitness Training would not be expected to have an immediate effect on personal relationship quality because of the paucity of opportunities for Soldiers to interact with their friends and families between the pretest and posttest. Consistent with this expectation, satisfaction with personal relationships (friends, parents, +/-spouse, children) did not change significantly over the 5-day period between the pre- and post-test, nor were there differences between the training conditions in changes in personal relationship satisfaction, loneliness, or depressive symptomatology. The specific effect size of Social Fitness, relative to Cultural Awareness, training on personal relationship satisfaction was small at d=0.09.

Mean-level changes in relationship satisfaction

CA
SF

Error bars reflect 95 % CI based on between-person SE
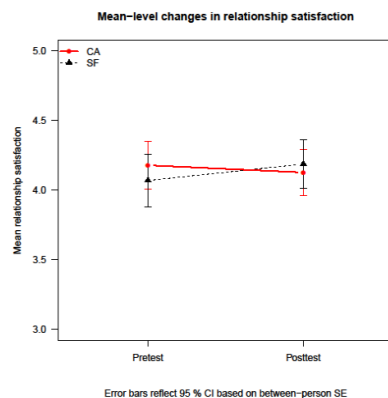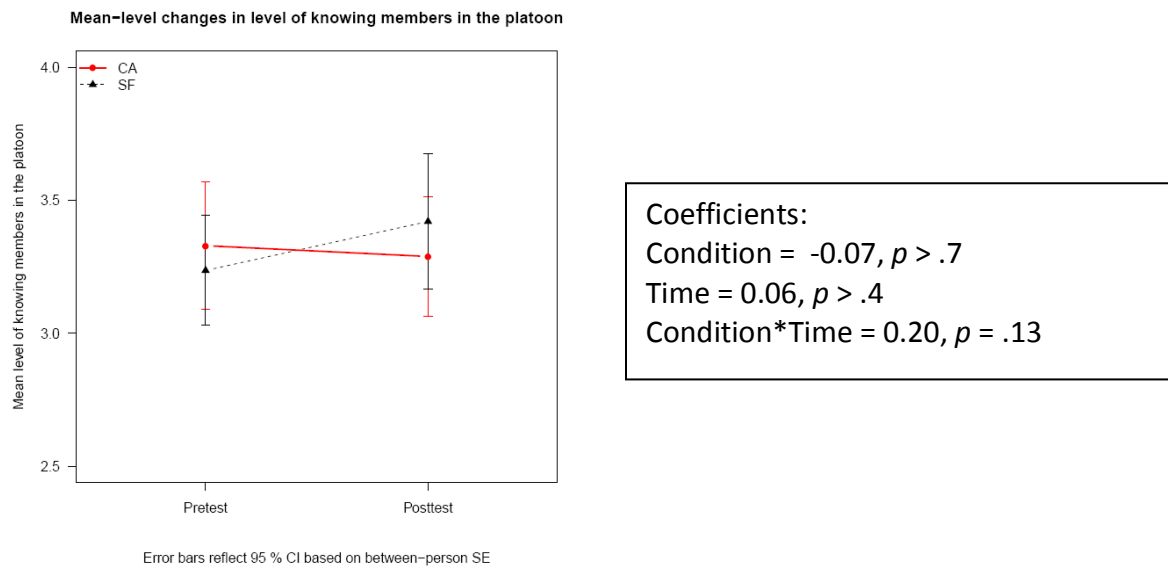
Coefficients:
Condition = -0.04, $p > .7$
Time = -0.01, $p > .9$
Condition*Time = 0.10, $p > .3$

A larger effect might be expected on a Soldier's relationship with others in the platoon, because this was the primary target of the intervention, and training was performed at the level of the platoon. As shown below, Soldiers in the Social Fitness Training did tend to report better

knowledge of members and significantly greater satisfaction with platoon relationships at post-test than did Soldiers in the Cultural Awareness Training. Moreover, SF training, relative to CA training, produced significant greater increases in Platoon relationship quality over the pre- to post-test interval, and the effect size was substantial at *d* = 0.31.

Platoon member knowledge as a function of time and experimental condition.

Mean-level changes in level of knowing members in the platoon

Coefficients:
Condition = -0.07, *p* > .7
Time = 0.06, *p* > .4
Condition*Time = 0.20, *p* = .13

Error bars reflect 95 % CI based on between−person SE

Platoon member knowledge: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Relationship with platoon member (how well know)
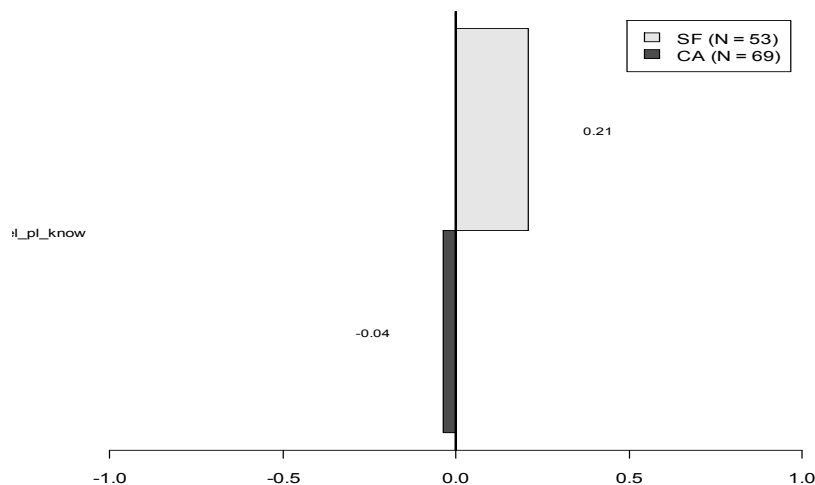
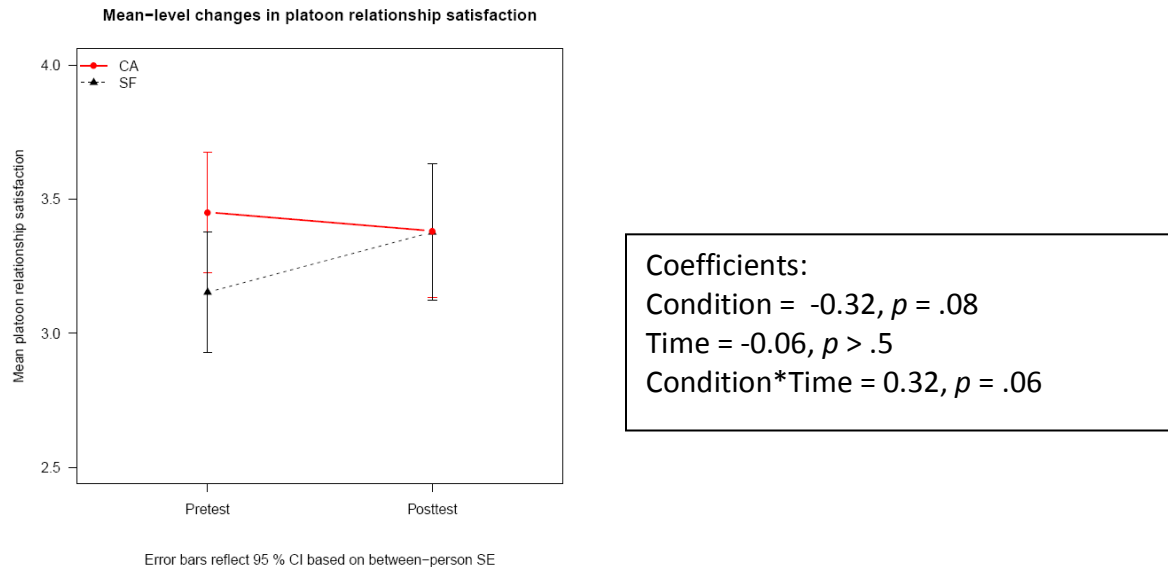Positive effect sizes = positive change in psychological terms

NOTE: A positive score means an increase and a negative score means a decrease in knowledge.

The effect of Social Fitness training on platoon member knowledge produced an effect size of d=0.25.
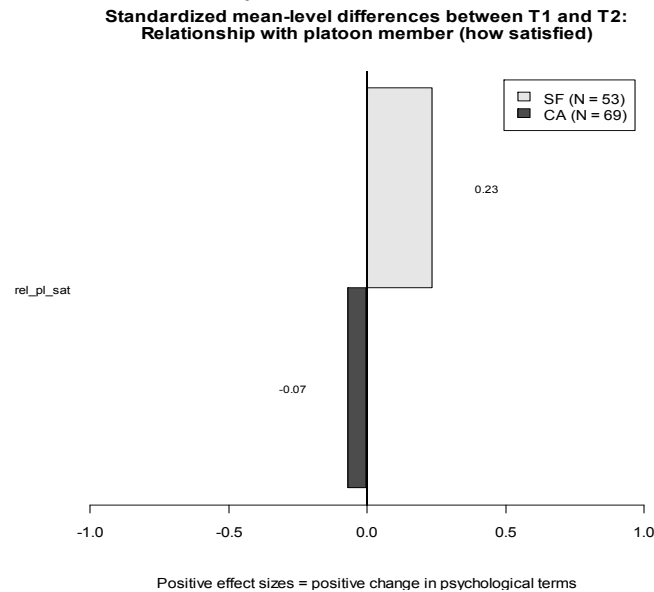
Social Fitness training also tended to improve satisfaction of relationships with people in the platoon. Specifically, the satisfaction of relationships with people in the platoon improved for the Social Fitness group, but not the Cultural Awareness group, producing a net effect size of .30 (see Figures below).

Platoon relationship satisfaction as a function of time and experimental condition.

Mean−level changes in platoon relationship satisfaction

Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = -0.32, p = .08
Time = -0.06, p > .5
Condition*Time = 0.32, p = .06

Platoon relationship satisfaction: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Relationship with platoon member (how satisfied)

SF (N = 53)
CA (N = 69)

0.23

rel_pl_sat

-0.07

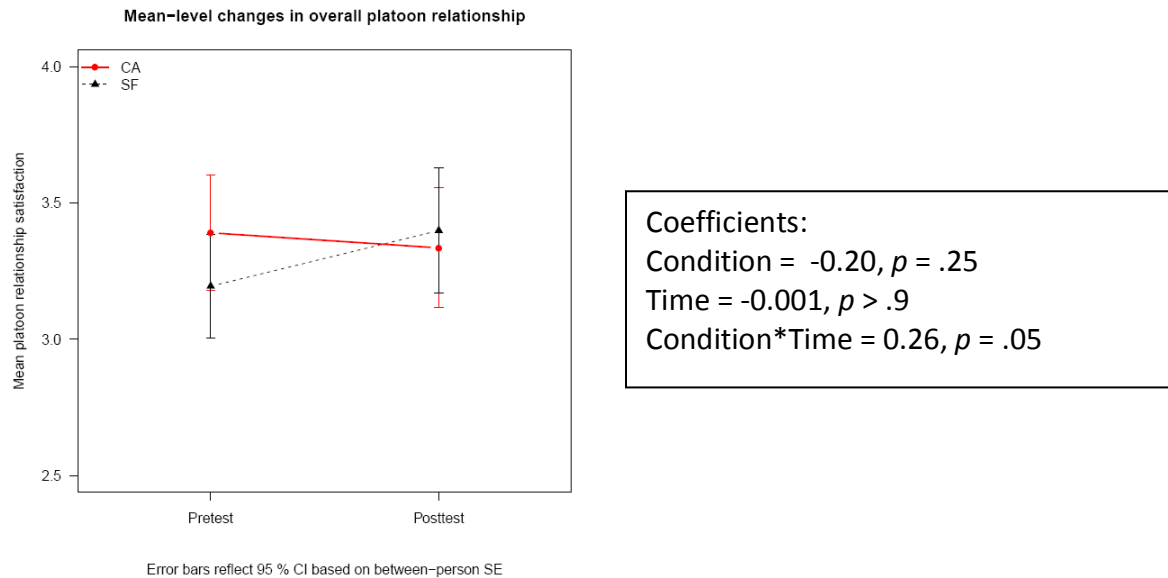Positive effect sizes = positive change in psychological terms

NOTE: A positive score means an increase and a negative score means a decrease in satisfaction.

To evaluate whether Social Fitness training improved overall platoon relationship, we averaged responses to the prior two items. Results showed that Social Fitness training, compared to the
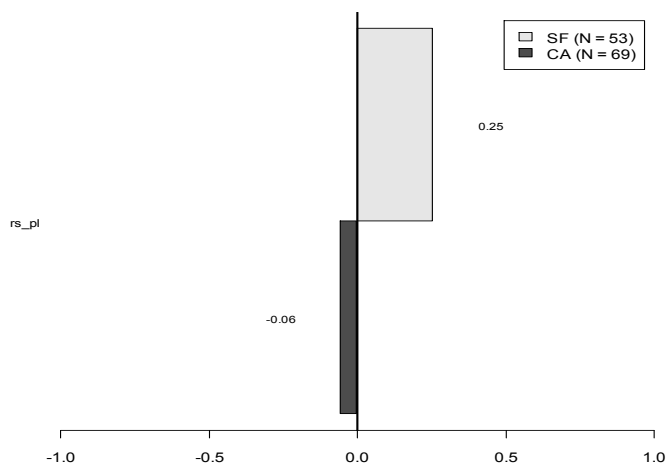
control group (Cultural Awareness training), improved platoon relationship quality by the posttest, with an overall effect size of .31.

Platoon relationship as a function of time and experimental condition.

Coefficients:
Condition = -0.20, p = .25
Time = -0.001, p > .9
Condition*Time = 0.26, p = .05

Overall Platoon relationship: Effect sizes as a function of experimental condition.

NOTE: A positive score means an increase and a negative score means a decrease in platoon relationship.

The analyses of the effects of training on platoon cohesion, summarized in the Figure below, showed that Social Fitness Training tended to increase platoon cohesion and support. The effect of Social Fitness training on platoon cohesion was d=0.12– a small to moderate effect size.

Platoon cohesion & support as a function of time and experimental condition.

Mean−level changes in Platoon cohesion and support

Coefficients:
Condition = -0.20, $p > .2$
Time = 0.08, $p > .2$
Condition*Time = 0.17, $p > .1$

Error bars reflect 95 % CI based on between−person SE

Platoon cohesion & support: Effect sizes as a function of experimental condition.

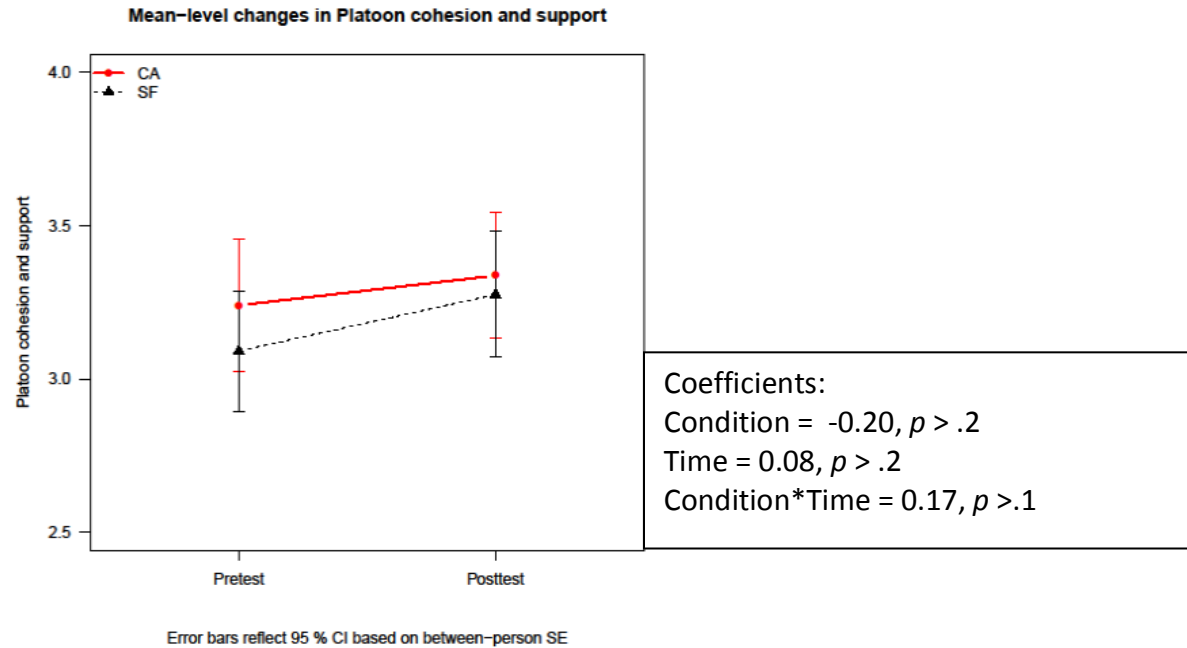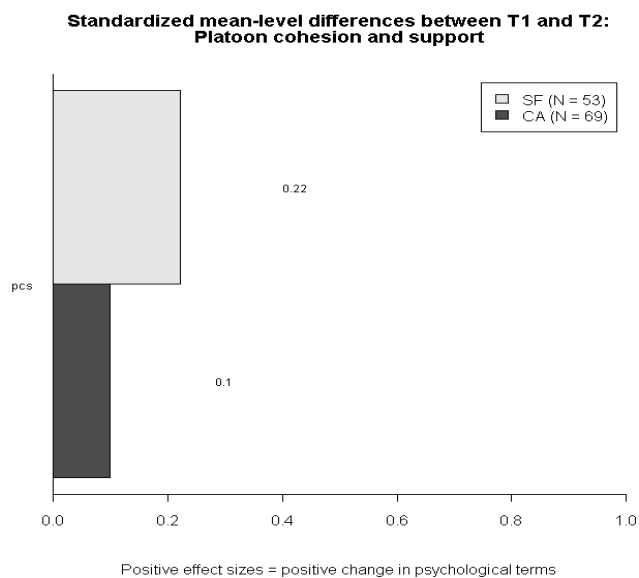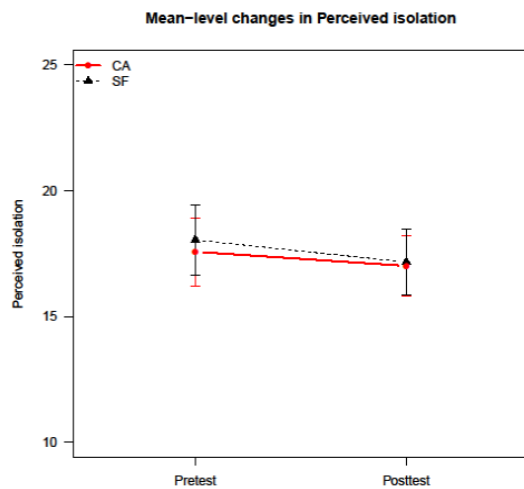Standardized mean-level differences between T1 and T2: Platoon cohesion and support

Positive effect sizes = positive change in psychological terms

NOTE: A positive score means an increase and a negative score means a decrease in Platoon cohesion and support.

The primary social resilience outcomes of interest over the longer-term include loneliness, depressive symptoms, and perceived stress. These are also outcomes that were expected to take time to change. Analyses of these measures indicated that, although not statistically significant, SF training, relative to CA training, produced a consistent pattern of decreases in all three outcomes over the short pre- to post-test interval. Effect sizes ranged from $d = .02$ (depressive symptoms) to $d = .21$ (perceived stress).
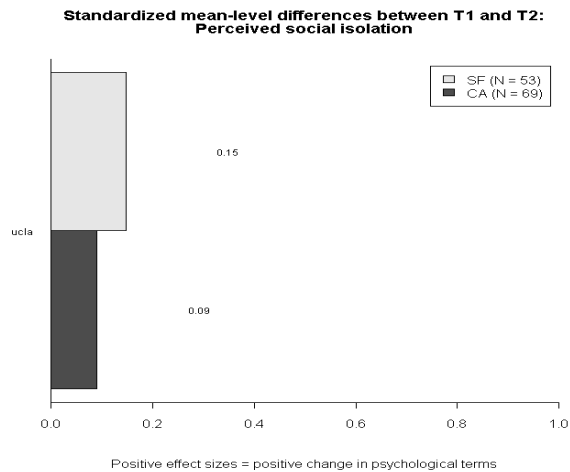
Mean−level changes in Perceived isolation

Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = 0.40, *p* > .6
Time = -0.57, *p* >.1
Condition*Time = -0.51, *p* > .3

Perceived social isolation: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Perceived social isolation

Positive effect sizes = positive change in psychological terms

NOTE: A positive score means a **decrease** in perceived social isolation.

Mean−level changes in Depressive symptomatology

Error bars reflect 95 % CI based on between−person SE
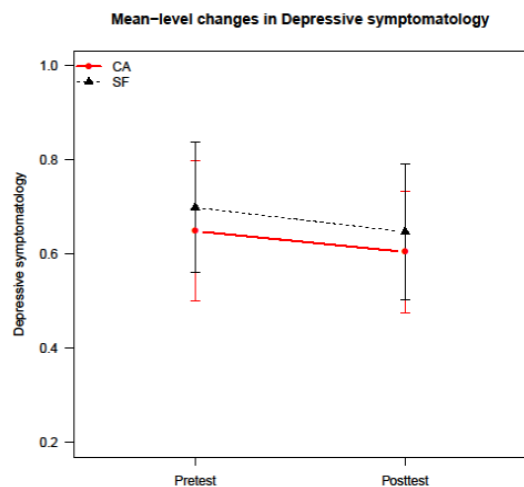
Coefficients:
Condition = 0.04, *p* > .6
Time = -0.08, *p* = .055
Condition*Time = 0.03, *p* > .6

28

Standardized mean-level differences between T1 and T2:
Depressive symptomatology

SF (N = 53)
CA (N = 69)

0.09

phq

0.07

0.0   0.2   0.4   0.6   0.8   1.0

Positive effect sizes = positive change in psychological terms

NOTE: A positive score means a **decrease** and a negative score means an **increase** in depressive symptoms.

Mean−level changes in Perceived stress

3.0 — CA
— SF

Perceived stress

2.5

2.0

1.5

Pretest   Posttest

Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = 0.16, $p > .3$
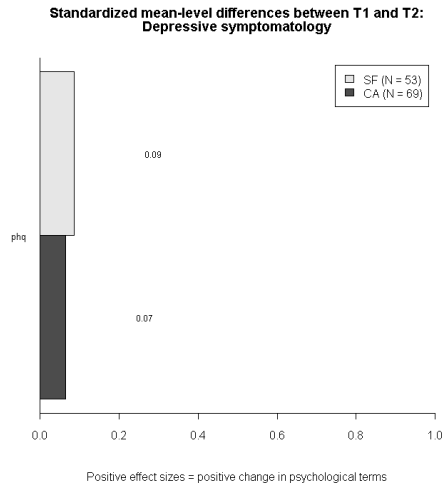Time = -0.06, $p > .3$
Condition*Time = -0.09, $p > .3$

Standardized mean-level differences between T1 and T2:
Perceived stress

SF (N = 53)
CA (N = 69)

0.2

pss

-0.01

-1.0   -0.5   0.0   0.5   1.0

Positive effect sizes = positive change in psychological terms
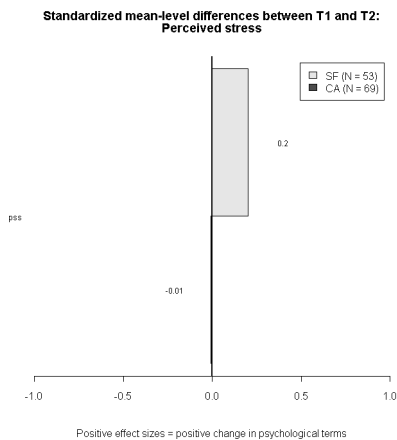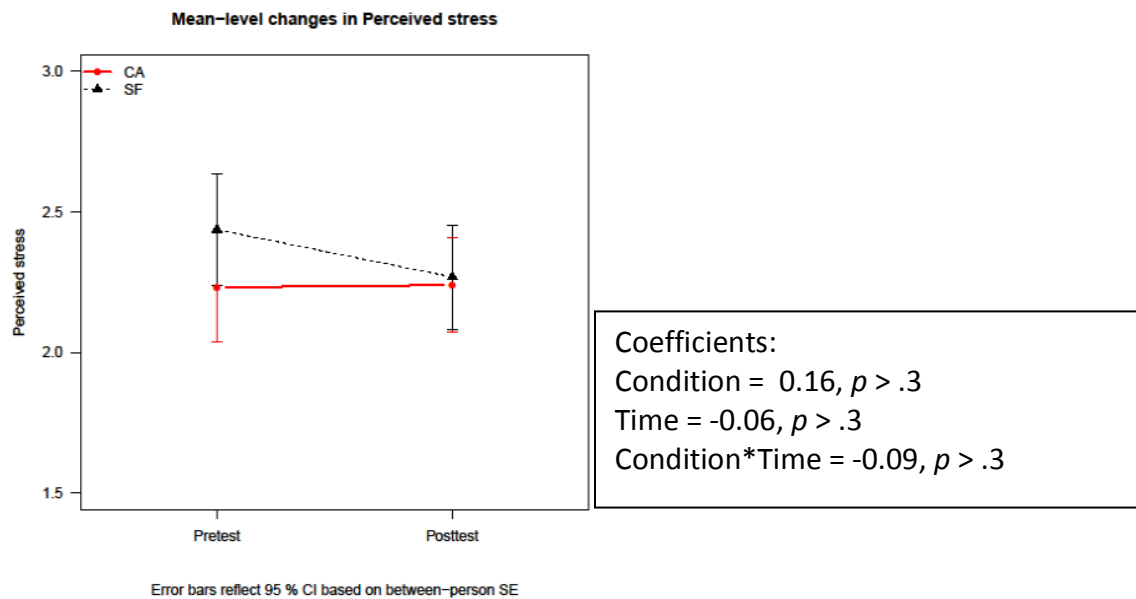
NOTE: A positive score means a **decrease** and a negative score means an **increase** in perceived stress.

Social resilience measures that would be expected to change more slowly with practice – perspective-taking ability, hostility, empathy, and social interaction anxiety – revealed consistent but modest (with the exception of hostility at d = .24) and changes in the SF relative to CA condition over the pre- to post-test interval. Results are detailed below.

Perspective-taking as a function of time and experimental condition.

Coefficients:
Condition = -0.13, $p > .2$
Time = -0.01, $p > .8$
Condition*Time = 0.11, $p > .2$
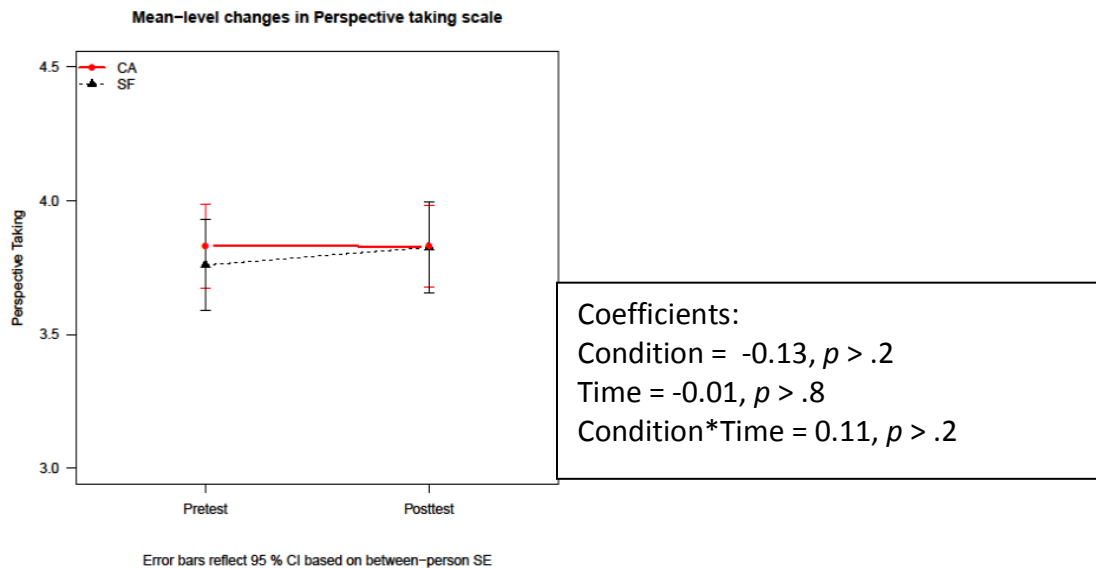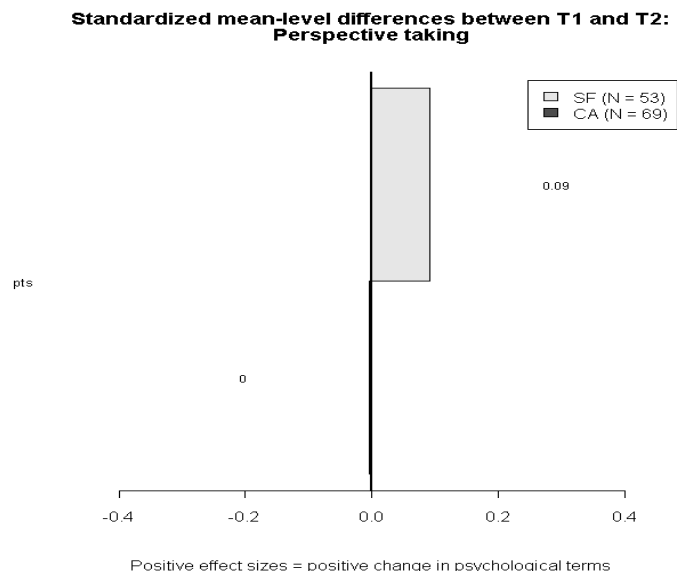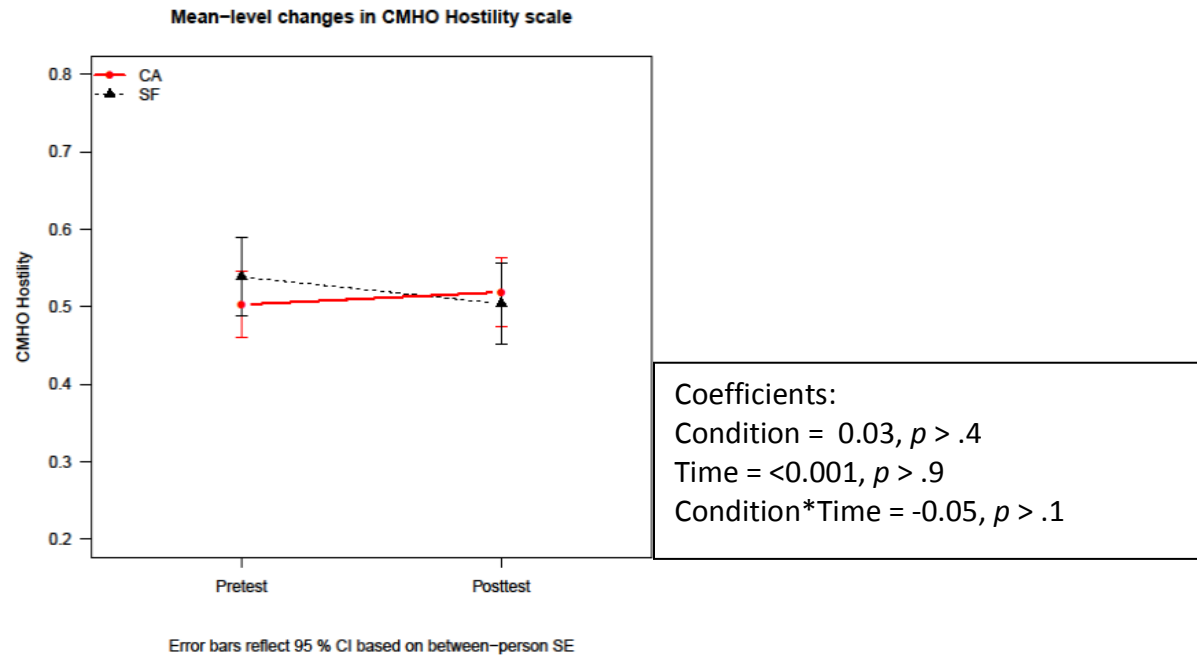
Error bars reflect 95 % CI based on between−person SE

Perspective-taking: Effect sizes as a function of experimental condition.

NOTE: A positive score means an increase and a negative score means a decrease in perspective-taking.

The effect of Social Fitness training, relative to the control group, on perspective-taking at post-test was small at d=0.09 and as predicted.

Hostility as a function of time and experimental condition.

Mean−level changes in CMHO Hostility scale

Coefficients:
Condition = 0.03, *p* > .4
Time = <0.001, *p* > .9
Condition*Time = -0.05, *p* > .1

Error bars reflect 95 % CI based on between−person SE

Hostility: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
CMHO hostility

SF (N = 53)
CA (N = 69)

0.16

cmho_ar

-0.08

Positive effect sizes = positive change in psychological terms

NOTE: A positive score means a **decrease** and a negative score means an **increase** in hostility.

The effect of Social Fitness training on hostility at post-test was moderate in size, d=0.24, and as predicted.

Empathy as a function of time and experimental condition.

Mean−level changes in empathy

Coefficients:
Condition = -0.23, $p > .1$
Time = <0.01, $p > .9$
Condition*Time = 0.14, $p > .2$

Error bars reflect 95 % CI based on between−person SE
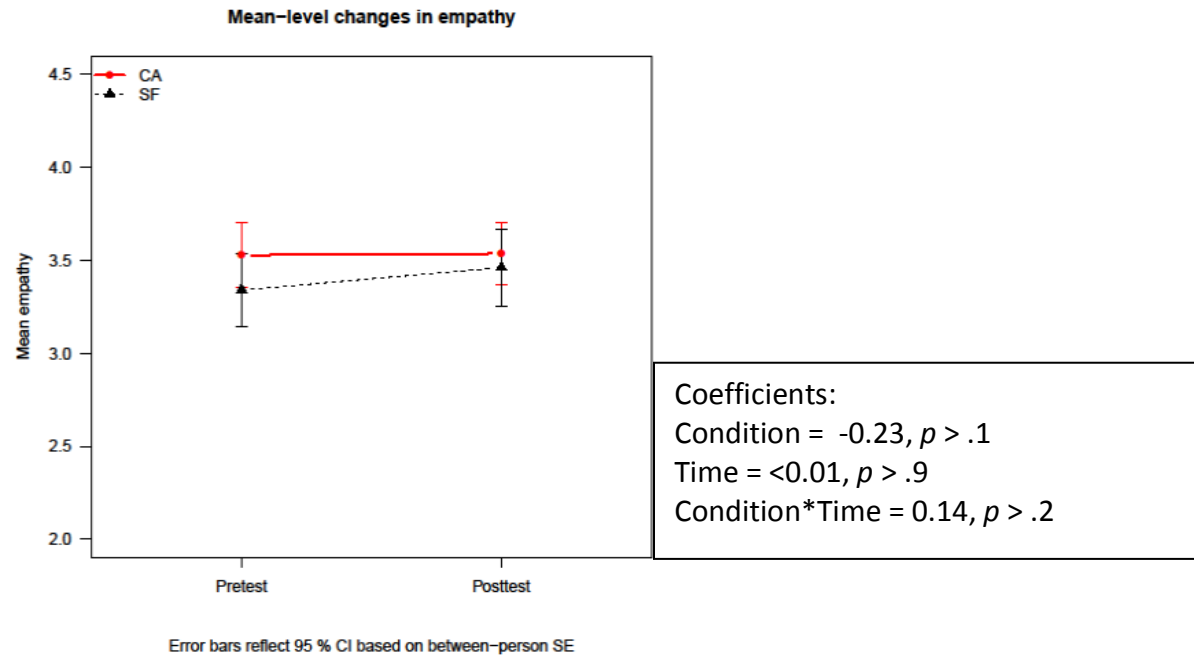
Empathy: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2: Empathy

SF (N = 53)
CA (N = 69)
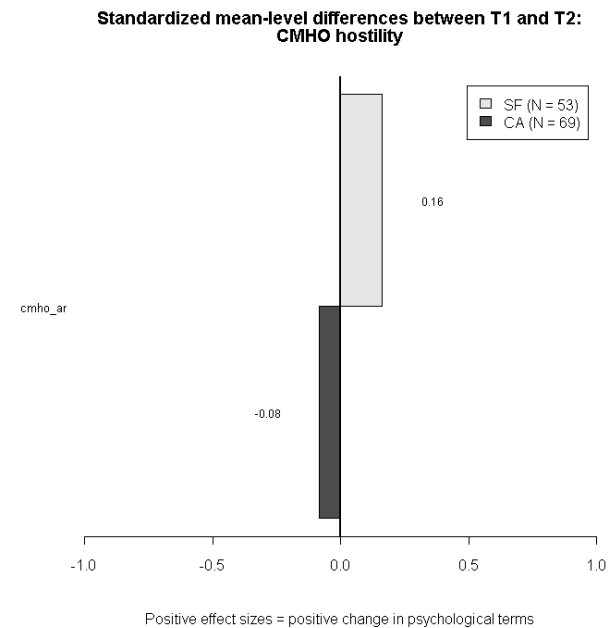
0.14

0.01

Positive effect sizes = positive change in psychological terms
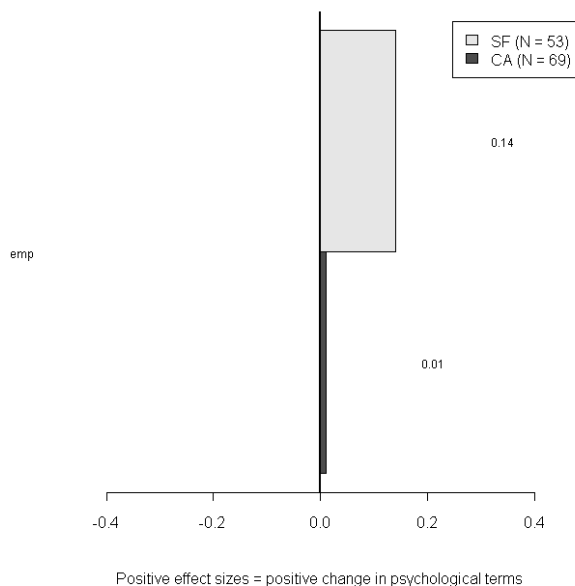
NOTE: A positive score means a increase and a negative score means an decrease in empathy.

The effect of Social Fitness training on empathy at post-test was small at d=0.13 and as predicted.

Hypothesis: Performance

We hypothesized that post-training performance would improve more for Soldiers in the Social

Fitness than the Cultural Awareness Condition, as indexed by measures of attitudes about and behavior in Platoons: organizational commitment, collective Platoon efficacy, organizational citizenship behavior, counterproductive work behavior, and treatment of the weakest link. Most of these effects were also posited to require time and practice to become evident, however.

Analyses indicated that, by the posttest, SF training had generally consistent and positive effects on performance measures, although effects were not statistically significant. Relative to CA training, the pattern of effects for SF training was of increased Platoon cohesion, collective Platoon efficacy, organizational commitment, organizational citizenship behaviors, and military hardiness, along with decreases in counterproductive work behavior. However, Platoon conflict showed no such benefit of SF training and in fact showed a small but nonsignificant adverse effect ($d = 0.14$) – an effect that is explicable in terms of laboratory research on group processes. Specifically, when a group is faced with a deviant, they initially try to bring the person's behavior into line with group norms. If this fails, the deviant is subjected to more hostile behaviors and is ostracized. Other performance outcomes had modest effect sizes of $d = 0.02 - 0.13$. The follow-up measures are important to judge the ultimate effects of the SF training on platoon performance. The pretest-posttest findings are detailed below.

Platoon conflict as a function of time and experimental condition.

Mean−level changes in Platoon conflict

Coefficients:
Condition = -0.04, $p > .8$
Time = -0.02, $p > .7$
Condition*Time = 0.10, $p > .3$

Error bars reflect 95 % CI based on between−person SE

Platoon conflict: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2: Platoon conflict

SF (N = 53)
CA (N = 69)

-0.15

pcon

0.1

Positive effect sizes = positive change in psychological terms

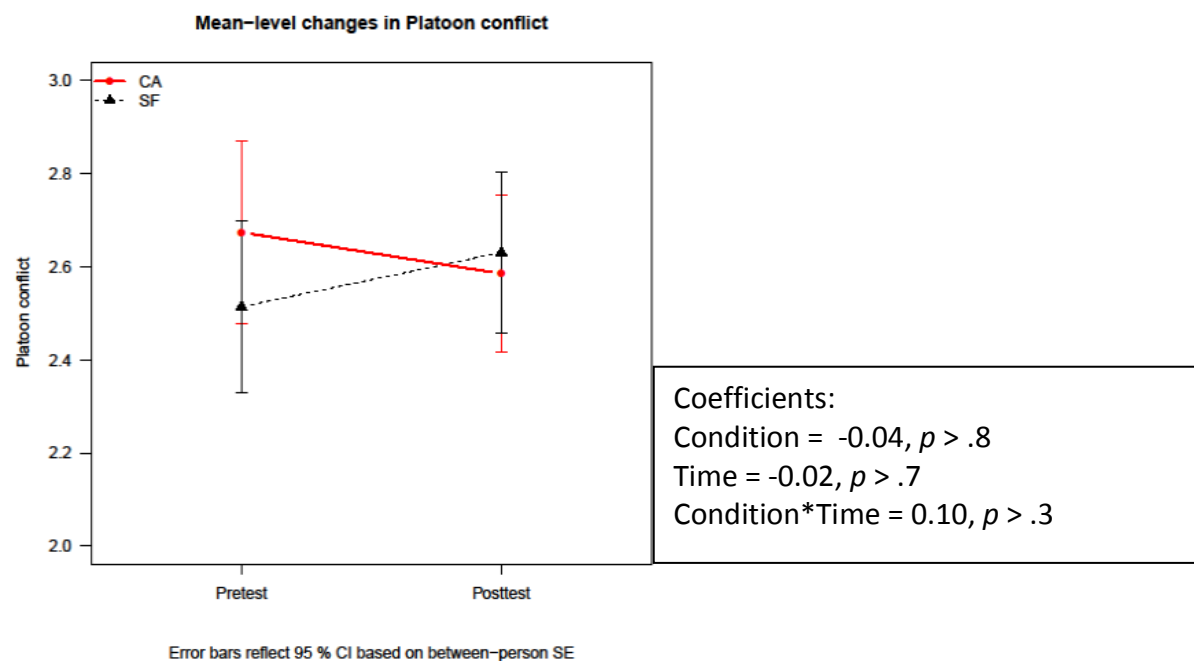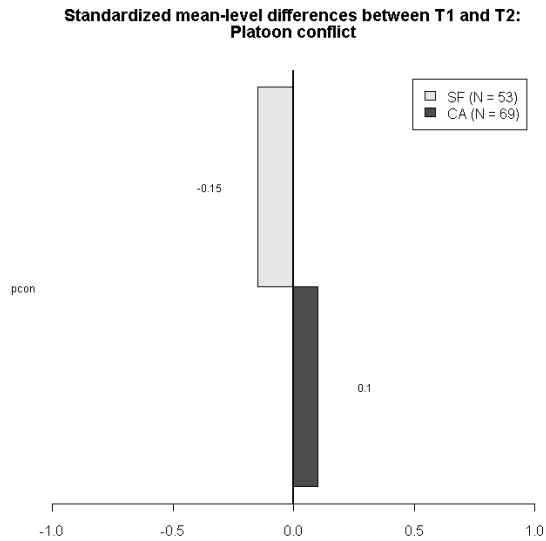NOTE: A positive score means a **decrease** and a negative score means an **increase** in Platoon conflict.

Collective Platoon efficacy as a function of time and experimental condition.

Mean−level changes in Collective platoon efficacy

Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = -0.08, $p > .6$
Time = 0.14, $p > .1$
Condition*Time = 0.12, $p > .3$
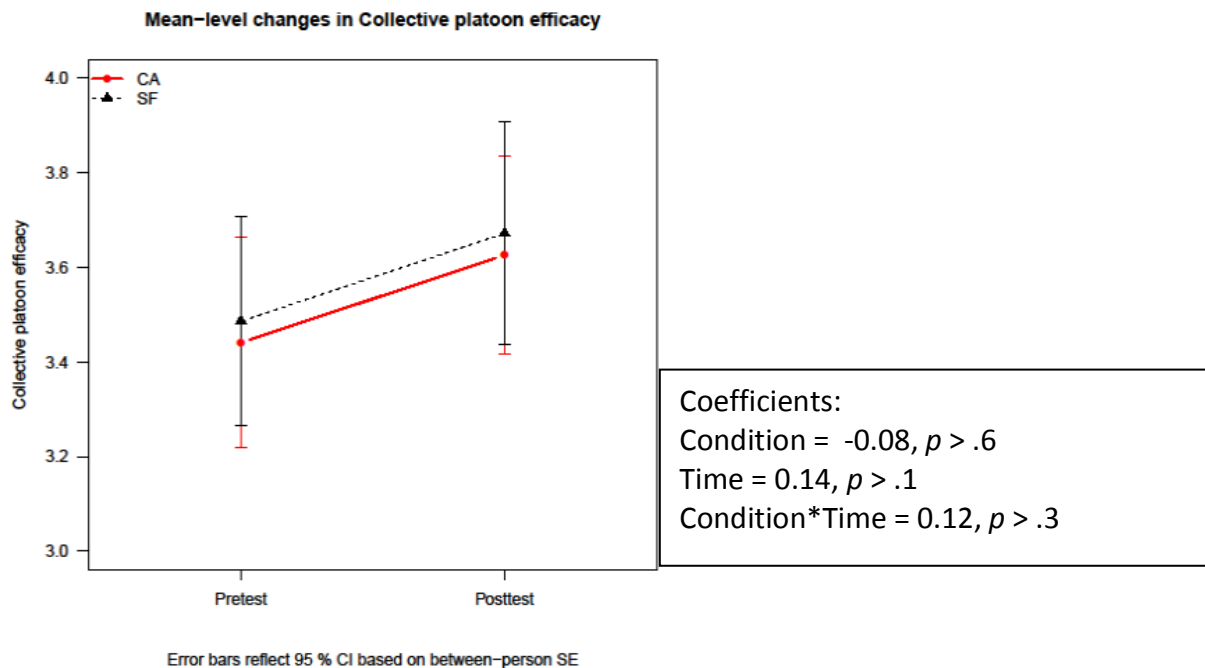
Collective Platoon efficacy did tended to increase from pre- to post-test in both groups, but there were no differences between the SF and CA conditions in Platoon efficacy changes.

Collective Platoon efficacy: Effect sizes as a function of experimental condition.

34

Standardized mean-level differences between T1 and T2:
Collective platoon efficacy
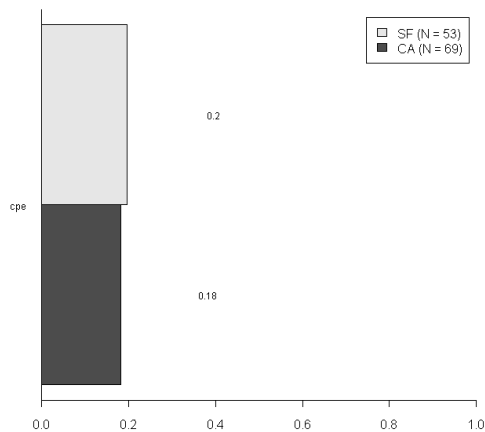
NOTE: A positive score means an increase and a negative score means a decrease in collective Platoon efficacy.

Organizational commitment as a function of time and experimental condition.
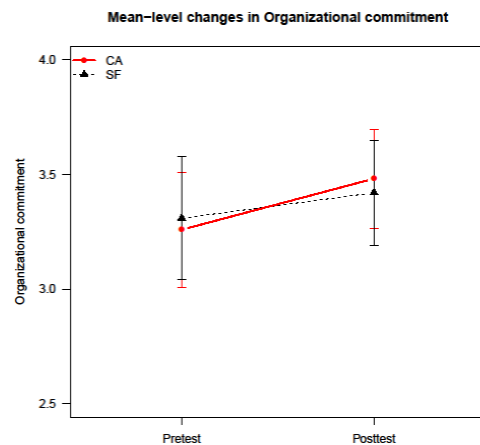
Coefficients:
Condition = -0.07, $p > .6$
Time = 0.16, $p < .05$
Condition*Time = 0.03, $p > .7$

Standardized mean-level differences between T1 and T2:
Organizational commitment
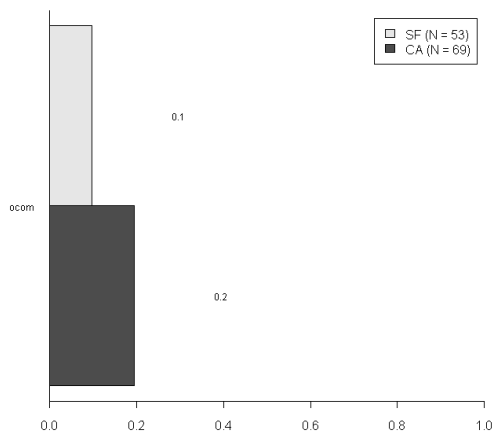
NOTE: A positive score means an increase and a negative score means a decrease in organizational commitment.

Organizational citizenship behaviors as a function of time and experimental condition.

Mean−level changes in Organizational citizenship behavior

Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = 0.06, $p > .6$
Time = 0.06, $p > .4$
Condition*Time = 0.15, $p > .1$

Organizational citizenship behaviors: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Organizational citizenship behavior

SF (N = 53)
CA (N = 69)

ocb   0.26

0.13

Positive effect sizes = positive change in psychological terms
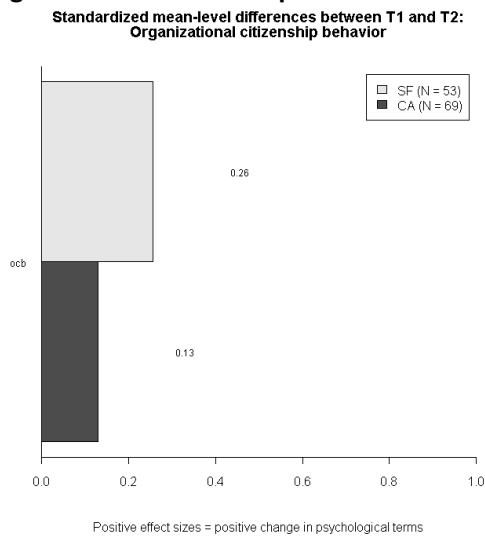
NOTE: A positive score means an increase and a negative score means a decrease in hardiness.

The effect of Social Fitness training on organizational citizenship behaviors at post-test was small in size at d=0.13.

Hardiness as a function of time and experimental condition.

Mean−level changes in military hardiness
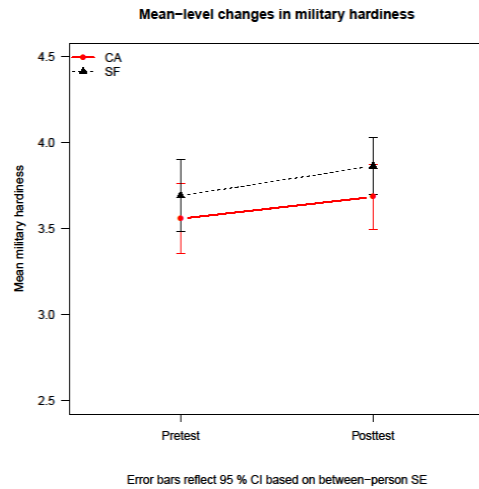
Coefficients:
Condition = 0.15, $p > .3$
Time = 0.10, $p > .1$
Condition*Time = 0.05, $p > .6$
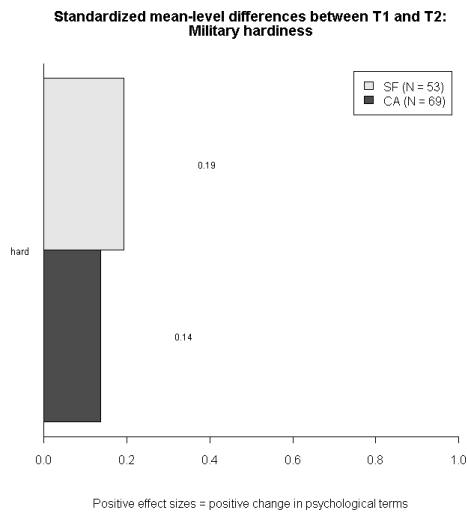
Error bars reflect 95 % CI based on between−person SE

Hardiness: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Military hardiness

SF (N = 53)
CA (N = 69)

0.19

hard

0.14

Positive effect sizes = positive change in psychological terms

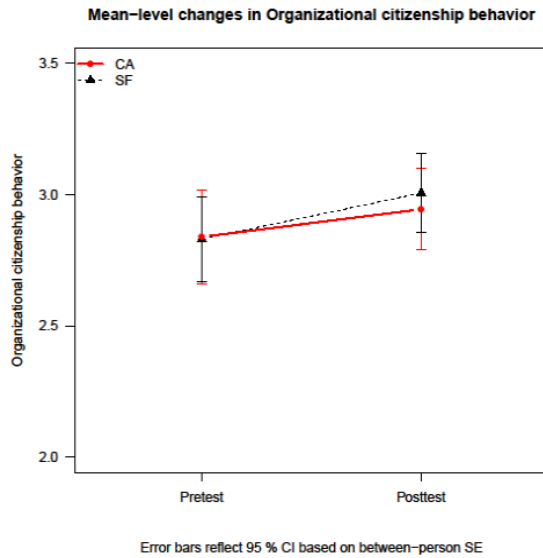NOTE: A positive score means an increase and a negative score means a decrease in hardiness.

Counterproductive work behavior as a function of time and experimental condition.

Mean−level changes in Counterproductive work behavior
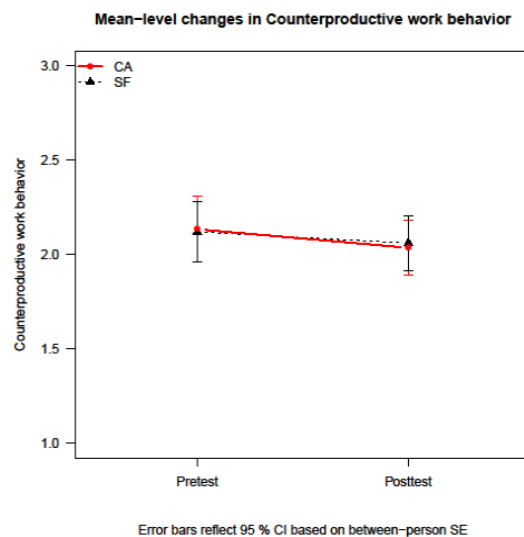
Coefficients:
Condition = -0.02, $p > .8$
Time = -0.09, $p > .2$
Condition*Time = 0.03, $p > .7$

Error bars reflect 95 % CI based on between−person SE

Counterproductive work behavior: Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
Counterproductive work behavior

SF (N = 53)
CA (N = 69)

0.09

cwb

0.12

0.0   0.1   0.2   0.3   0.4   0.5

Positive effect sizes = positive change in psychological terms
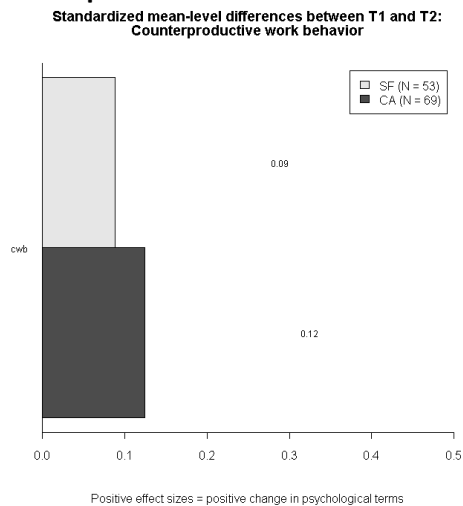
NOTE: A positive score means a **decrease** and a negative score means an **increase** in counterproductive work behavior.

Treatment of weakest link as a function of time and experimental condition.

Mean−level changes in Treatment of the weakest link

CA
SF

Treatment of the weakest link

5.0

4.5

4.0

3.5

Pretest   Posttest

Error bars reflect 95 % CI based on between−person SE
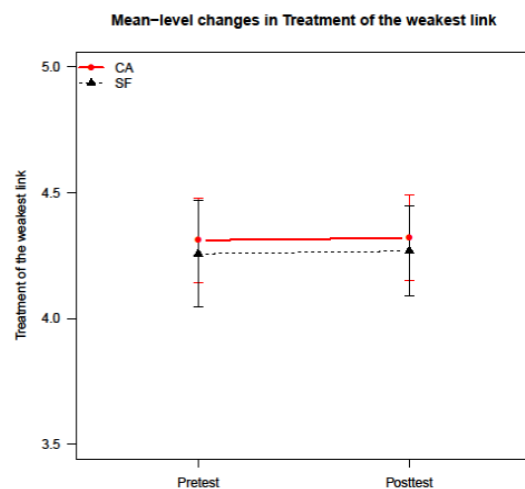
Coefficients:
Condition = -0.12, *p* > .4
Time = -0.05, *p* > .4
Condition*Time = 0.06, *p* > .5

There was no measurable effect of Social Fitness training on treatment of the weakest link at post-test, d=0.0.

Hypothesis: Ingroup/Outgroup Similarity

The double-dissociative nature of the clinical trial was developed so that both treatments would be effective but for different social outcomes. To test this, we tested the hypothesized effects of Cultural Awareness training on post-training ratings of the Afghani people's warmth and competence. Given the nature of the training, we hypothesized that the former would increase among Soldiers in the Cultural Awareness Condition but not among those in the Social Fitness Condition.

Afghanistan knowledge. Before testing the hypothesis, we verified that Cultural Awareness training increased Soldiers' knowledge of Afghanistan geography, history, and culture. Most Soldiers knew very little about Afghan culture, history, governance, or geography prior to training, so our knowledge tests were designed be straightforward tests to detect any increases in knowledge. Results revealed that the baseline level of knowledge was minimal and the level of knowledge increased dramatically after eight hours of training, with a large effect size evident at the posttest (d = 1.73).

Afghanistan knowledge as a function of time and experimental condition.

Coefficients:
Condition = -0.04, *p* > .8
Time = 2.04, *p* < .001
Condition*Time = -1.93, *p* < .001

Error bars reflect 95 % CI based on between−person SE

Afghanistan knowledge: Effect sizes as a function of experimental condition.
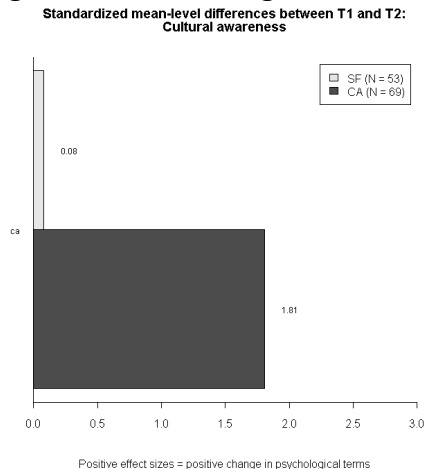
NOTE: A positive score means an increase and a negative score means a decrease in cultural awareness.

Given that CA training was informative, was it effective in altering Soldiers' assessments of Afghani people's warmth?

Afghani warmth (relative to U.S. warmth) as a function of time and experimental condition.

Mean−level changes in Perceived difference in warmth
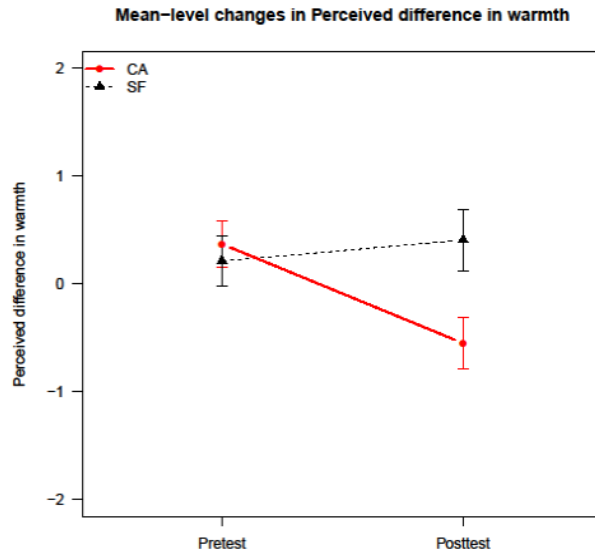
Coefficients:
Condition = -0.16, *p* > .3
Time = -0.97, *p* < .001
Condition*Time = 1.12, *p* < .001

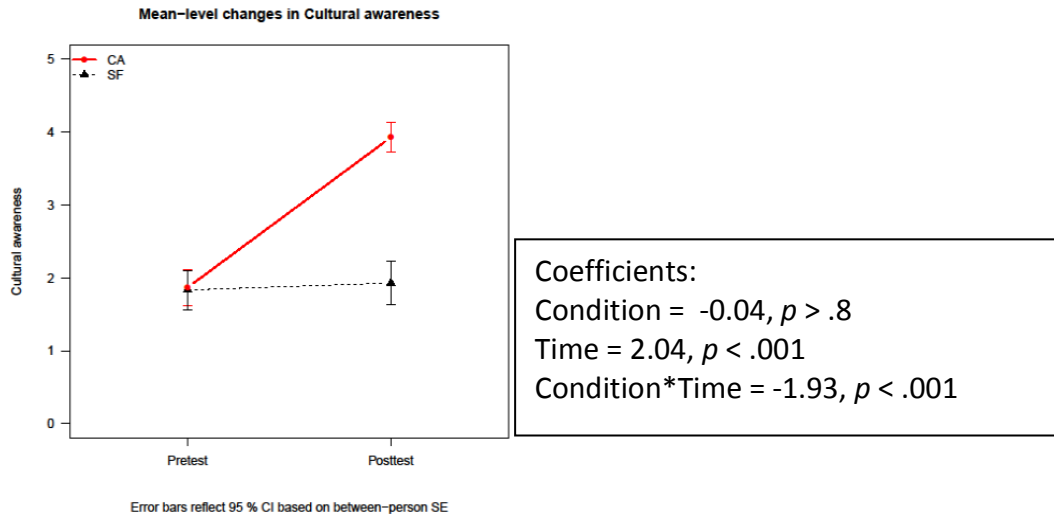Error bars reflect 95 % CI based on between−person SE

Relative to Social Fitness training, Cultural Awareness training resulted in a significant reduction in the discrepancy between ratings of Americans' and Afghanis' warmth. This was due to a significantly greater increase in ratings of Afghani warmth, but not American warmth, in the CA relative to the SF condition.

Mean−level changes in Perceived warmth of Americans
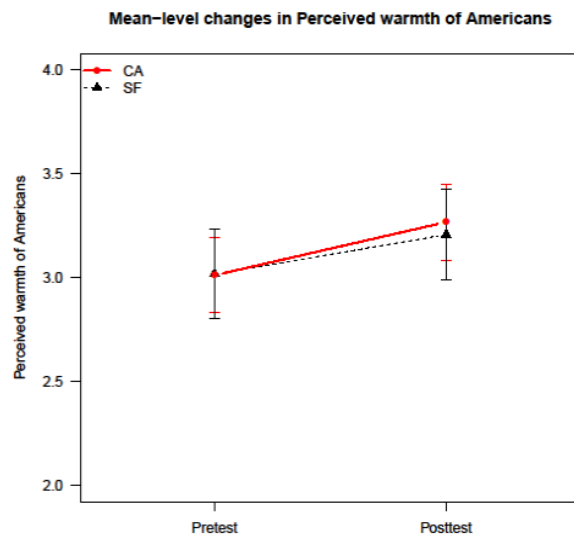
Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = 0.02, *p* > .8
Time = 0.23, *p* < .01
Condition*Time = -0.09, *p* > .4

Mean−level changes in Perceived warmth of Afghans
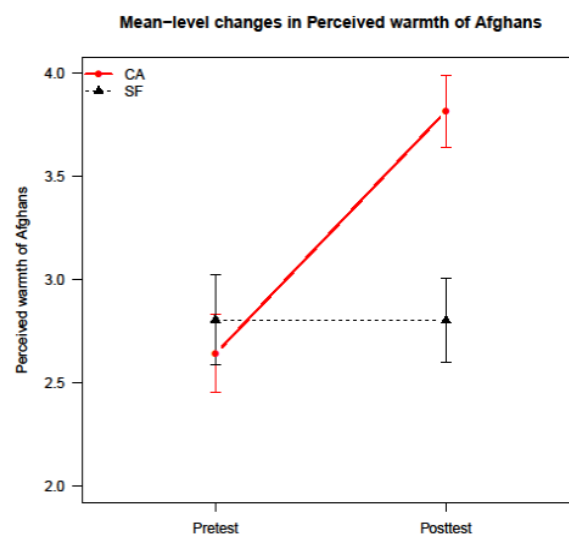
Error bars reflect 95 % CI based on between−person SE

Coefficients:
Condition = 0.17, *p* > .2
Time = 1.20, *p* < .001
Condition*Time = -1.20, *p* < .001

Afghani warmth (relative to U.S. warmth): Effect sizes as a function of experimental condition.

Standardized mean-level differences between T1 and T2:
IGOG difference in perceived warmth

Positive effect sizes = positive change in psychological terms
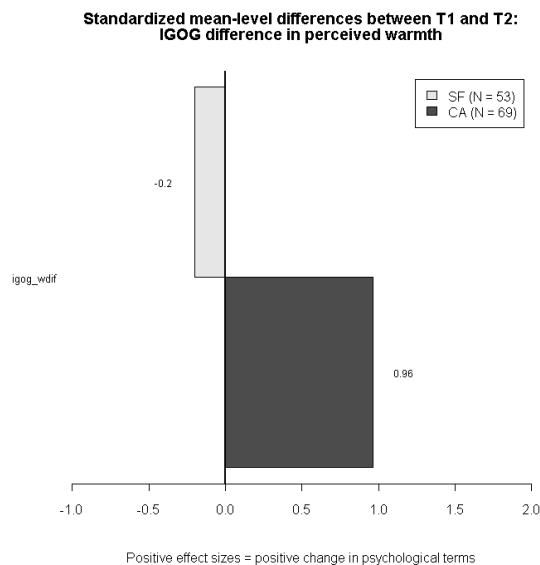
NOTE: A positive score means an increase and a negative score means a decrease in ratings of Afghani warmth relative to U.S. warmth.

As expected, the effects of CA training were specific to the dimension of warmth and did not generalize to perceptions of Afghani competence.

Moderator Analyses

We hypothesized that characteristics of the Soldiers (e.g., baseline social resilience percentile on the GAT, age, military rank) will influence the size of the effect of training on post-training measures of resilience and performance.

We sought to test thousands of Soldiers to conduct moderator analyses. The small sample size enrolled to date in the clinical trial places severe limitations on the statistical power of any test of moderators. Therefore, the results of our moderator analyses should be regarded as only preliminary. Although most tests were predictably nonsignificant, there were two exceptions. First, platoon relationship satisfaction improved more in the low risk than the high risk group receiving SF training, and Platoon conflict increased more in the high risk than the low risk group among those receiving SF training.

NCO status mattered for some measures, with a general pattern of greater benefit of SF training for non-NCO's than for NCO's (decreases in perceived stress, increases in personal relationship satisfaction). Marital status also mattered; non-married Soldiers exhibited greater increases than married Soldiers in beliefs in social fitness at post-test.

Harassment and combat experiences were associated with differential effects in the CA condition, not the SF condition. Depressive symptoms, personal relationship satisfaction, and organizational citizenship behaviors exhibited what appeared to be regression to the mean in the CA condition. In the SF condition, these outcomes did not vary as a function of level of

harassment or combat experiences. Additional statistical power is needed before any of these moderators can be regarded as reliable.

Baseline risk (GAT)*: Is Soldiers baseline risk, as defined by those with scores in the bottom 25% of aggregate scores on the GAT, differentially associated with changes in social resilience and performance at post-test?*

The SAAT clinical trial is designed not only to examine the effects of SF training, but to determine whether the benefits of SF training extend to those who are most fragile (and problematic) – those in the bottom quartile of the GAT assessment. As in the case of the moderator analyses, these analyses require a much larger sample sizes than was available at Fort Sill. We nevertheless conducted analyses, but the sample size of the bottom quartile in this dataset involves about a dozen Soldiers, so any results should be viewed cautiously and regarded as entirely preliminary.

With that caveat in mind, analyses hinted that high levels of baseline GAT risk did not predict differential responsiveness on most measures of social resilience and performance, nor did high and low risk groups differ in the effects of CA training. Baseline GAT risk was a significant moderator of pre-post changes in (a) Platoon conflict, and (b) Platoon relationship satisfaction.

a) Platoon conflict

Coefficients:
Condition = 0.10, *p* > .5
Time = 0.07, *p* >.4
GAT risk = 0.60, *p* < .01
Condition*Time = -0.03, *p* >.8
Condition*GAT risk = -0.62, *p*< .05
Time*GAT risk= -0.36, *p*< .05
Condition*Time*GAT risk= 0.50 *p* < .05

Cultural awareness:
Time = 0.06, *p* >.4
GAT risk = 0.60, *p* < .01
Time*GAT risk= -0.36, *p*< .05

Social Fitness:
Time = 0.04, *p* >.6
GAT risk = -0.02, *p* >.9
Time*GAT risk= 0.14, *p* >.3
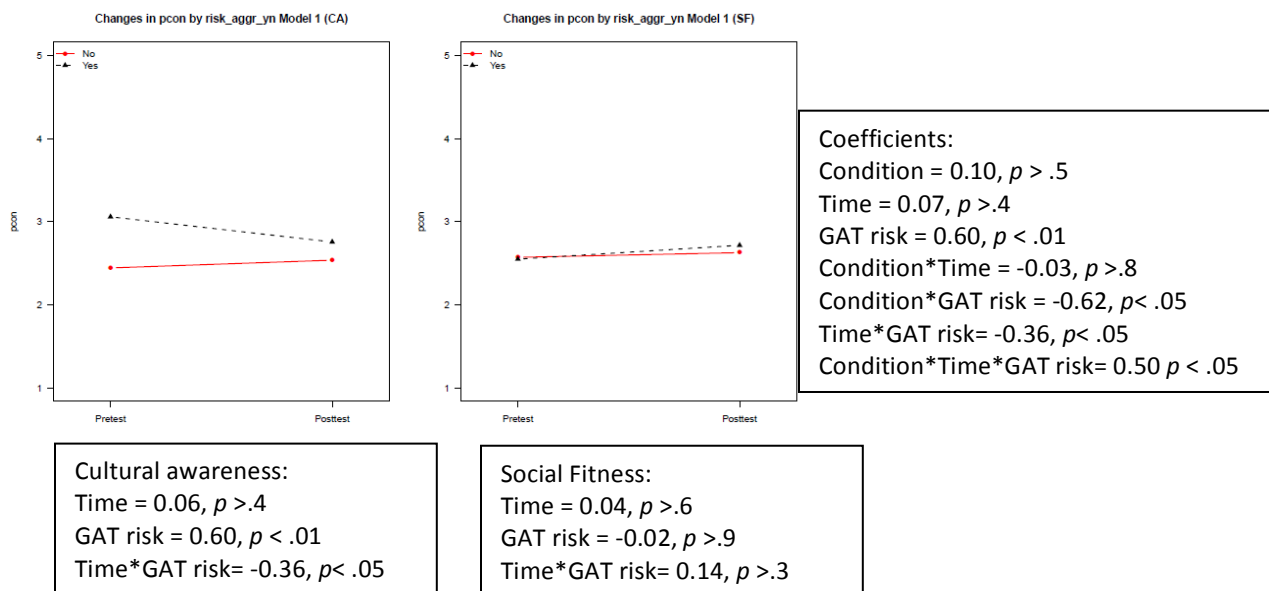
Contrary to expectations, Platoon conflict decreased more in the high risk than the low risk group in the CA condition, and did not differ between risk groups in the SF condition.

Changes in rs_pl by risk_aggr_yn Model 1 (CA)   Changes in rs_pl by risk_aggr_yn Model 1 (SF)

Coefficients:
Condition = -0.32, $p > .07$
Time = -0.07, $p > .4$
GAT risk = -0.78, $p < .001$
Condition*Time = 0.43, $p < .01$
Condition*GAT risk = 0.51, $p > .1$
Time*GAT risk= 0.28, $p > .1$
Condition*Time*GAT risk = -0.63, $p < .05$

Cultural awareness:
Time = -0.08, $p > .4$
GAT risk = -0.79, $p < .01$
Time*GAT risk= 0.27, $p > .2$

Social Fitness:
Time = 0.37, $p < .001$
GAT risk = -0.32, $p > .1$
Time*GAT risk= -0.35, $p = .05$
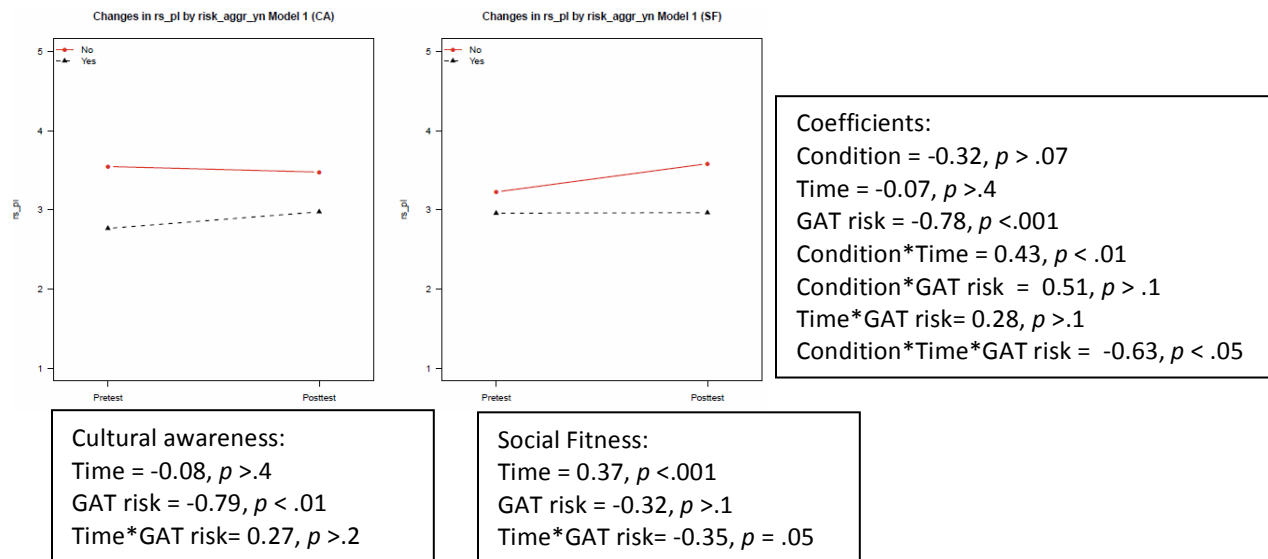
As shown in the figures above, Platoon relationship satisfaction improved more in the low risk than the high risk group in the SF condition.

Baseline risk (loneliness)*: Is Soldiers' baseline loneliness risk, defined as loneliness scores in the top quartile at pre-test, differentially related to post-training resilience and performance?*

Baseline loneliness risk was a significant moderator of pre-post changes in perceived social fitness. Other outcomes were unrelated to differences in baseline loneliness risk. The caveats raised above apply to this and all subsequent analyses, however.

Changes in psf by risk_ucla_yn Model 1 (CA)   Changes in psf by risk_ucla_yn Model 1 (SF)

Coefficients:
Condition = -0.08, $p > .4$
Time = 0.23, $p < .001$
Lonely risk = -0.77, $p < .001$
Condition*Time = 0.02, $p > .8$
Condition* Lonely risk = -0.61, $p < .05$
Time* Lonely risk = -0.28, $p < .05$
Condition*Time*Lonely risk = 0.54, $p < .05$

Cultural awareness:
Time = 0.23, $p < .001$
Lonely risk = -0.78, $p < .001$
Time*Lonely risk= -0.27, $p < .05$

Social Fitness:
Time = 0.25, $p < .01$
Lonely risk = -1.39, $p < .001$
Time*Lonely risk= 0.27, $p > .1$

As shown above, in the CA condition, low-risk Soldiers exhibited significantly greater increases in perceived social fitness than their high-risk counterparts, a finding that was not statistically significant for any other outcome and might be expected by chance alone. In the SF condition, although the Time*Lonely Risk coefficient is of the same magnitude as for the CA condition

(0.27), the risk groups did not differ significantly in perceived social fitness changes from pre-to post-test (*p*>.1).

Attendance*: Do Soldiers who attend all sessions show greater improvement in social fitness than those absent for one or more sessions?*
Overall, 105 Soldiers (86.1%) attended all five sessions, and 17 Soldiers missed one or more sessions. Perfect attendance rates did not differ between the SF (81.1%) and CA (89.9%) conditions. There were no differences in the effects of training on social resilience and performance, or on cultural awareness and ingroup-outgroup beliefs, between those who attended all versus only some of the training sessions.

Satisfaction with training*: Do individual differences in satisfaction with Social Fitness training explain differences in the effect of Social Fitness training on social resilience and performance?*
Overall, 80% of Soldiers were satisfied with the training (ratings of 4 or 5 on the 5-point scale, *M*=4.24, *SD*=0.85), about 15% were noncommittal (rating of 3), and the balance were somewhat dissatisfied (rating of 2). Satisfaction ratings did not differ between the SF (*M*=4.21, *SD*=0.91) and CA (*M*=4.26, *SD*=0.82) conditions, *F*(1, 120)=0.116, *p*> .7. There were no differences in the effects of training on social resilience and performance, or on cultural awareness and ingroup-outgroup beliefs, as a function of degree of satisfaction with the training.

Survey time*. Do Soldiers who take longer to complete the pre-test survey exhibit differential changes in social resilience and performance in the SF than the CA Condition at post-test?*
Survey time did not moderate the effect of training on measures of social resilience and performance, or on measures of cultural awareness and ingroup-outgroup beliefs.

Age*. Do older relative to younger Soldiers exhibit differential changes in social resilience and performance in the SF than the CA Condition at post-test?*
Age did not appear to moderate the effect of training on measures of social resilience and performance, or on measures of cultural awareness and ingroup-outgroup beliefs.

Gender*: Do males and females show differential responses to Social Fitness training?*
Males and females did not differ in the effect of SF training on any of the measures of social resilience and performance. However, gender was a significant moderator of pre-post changes in cultural knowledge. In the CA condition, both males and females increased their cultural knowledge, whereas in the SF condition, males exhibited no change and females exhibited a decrease.

Changes in ca by gender Model 1 (CA)

Changes in ca by gender Model 1 (SF)

Coefficients:
Condition = -1.04, *p* > .07
Time = 1.31, *p* < .05
Male = 0.20, *p* >.6
Condition*Time = -0.17, *p* > .8
Condition* Male = 1.11, *p* >.07
Time*Male = 0.76, *p* >.1
Condition*Time*Male = -1.92, *p* < .05
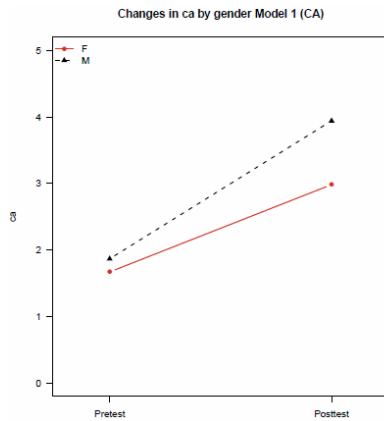
Cultural awareness:
Time = 1.30, *p* <.05
Male = 0.18, *p* >.6
Time*Male = 0.80, *p* >.2
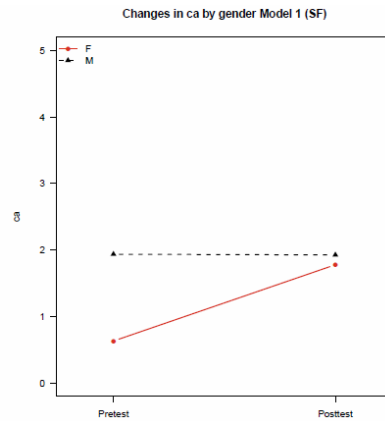
Social Fitness:
Time = 1.08, *p* <.05
Male = 1.20, *p* <.01
Time*Male = -1.10, *p* <.05

Education: Do Soldiers with a high school diploma or more show differential effects of Social Fitness training relative to their less educated counterparts?
Soldiers with diplomas constituted 97.5% of the sample (i.e., 118 of 122 Soldiers), and moderator analyses were therefore not conducted.

Rank. Do NCO's and non-NCO's exhibit differential effects of Social Fitness training on social resilience and performance at post-test?
Three-way interactions between gender, condition, and rank showed that rank was a significant moderator of pre-post changes in (a) perceived stress, and (b) personal relationship satisfaction.

   a) Perceived stress

Changes in pss by nco Model 1 (CA)

Changes in pss by nco Model 1 (SF)

Coefficients:
Condition = 0.31, *p* >.07
Time = -0.02, *p* >.7
NCO = -0.07, *p* >.7
Condition*Time = -0.23, *p* <.05
Condition*NCO = -0.38, *p* > .2
Time*NCO = -0.22, *p* >.1
Condition*Time*NCO = 0.51, *p* < .05
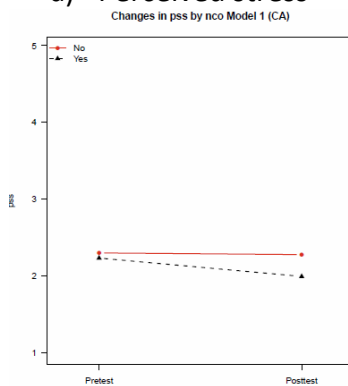
Cultural awareness:
Time = -0.03, *p* >.6
NCO = -0.07, *p* > .7
Time*NCO = -0.21, *p* >.1
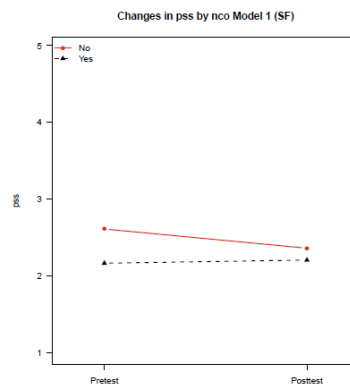
Social Fitness:
Time = -0.25, *p* <.05
NCO = -0.44, *p* <.05
Time*NCO = 0.26, *p* >.1

Although the three-way interaction was significant, neither of the two-way interactions in the stratified analyses achieved statistical significance. As shown in the figures above, the interactive effect appeared attributable to NCO status having opposing effects in the CA and SF

conditions, where NCO's showed a reduction in stress in the CA conditions, whereas non-NCO's showed a reduction in stress in the SF condition. The latter finding is potentially interesting given the emphasis in SF training on the NCOs implementing social fitness practice into their daily training routines.

Personal relationship satisfaction

Changes in rs by nco Model 1 (CA)

Changes in rs by nco Model 1 (SF)

Coefficients:
Condition = -0.02, p >.8
Time = -0.10, p >.1
NCO = -0.21, p >.3
Condition*Time = 0.21, p >.07
Condition*NCO = 0.01, p > .9
Time*NCO = 0.46, p <.01
Condition*Time*NCO = -0.55, p < .05

Cultural awareness:
Time = -0.10, p >.2
NCO = -0.20, p > .6
Time*NCO = 0.46, p <.05

Social Fitness:
Time = 0.12, p >.1
NCO = -0.21, p >.2
Time*NCO = -0.10, p >.5
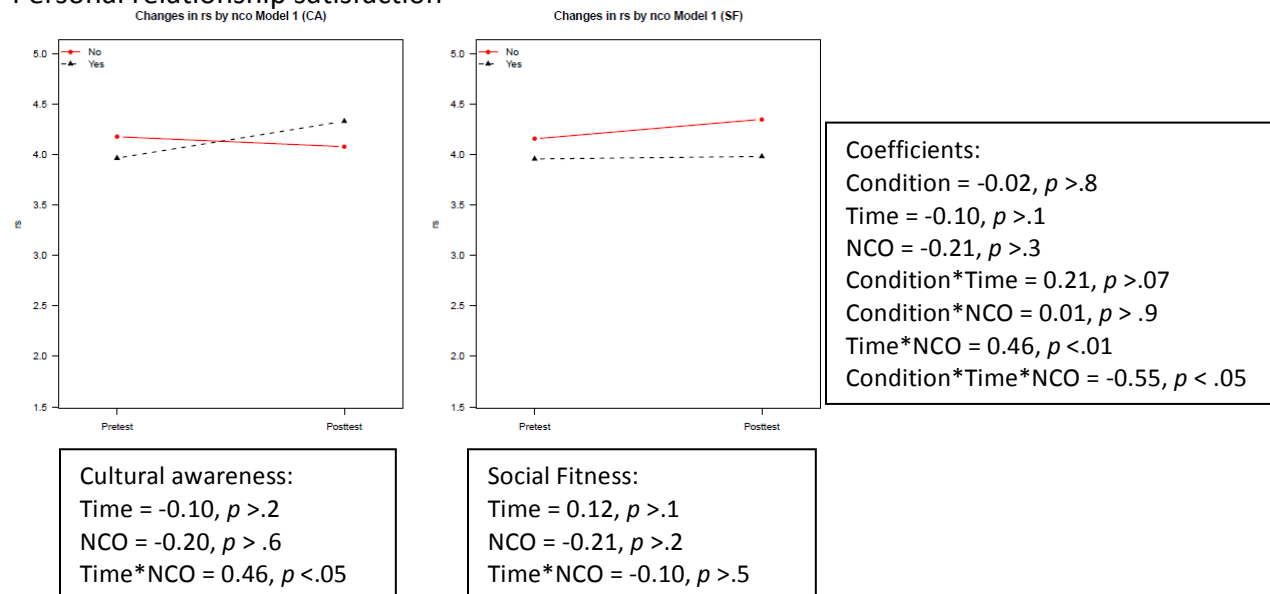
As shown in the figures above, stratified analyses showed that NCO's showed a greater improvement in personal relationship satisfaction than non-NCO's in the CA condition, but NCO status was not associated with differential effects of SF training.

Marital status: Is being married or in a marital-like cohabiting relationship differentially associated with changes in social resilience and performance after Social Fitness relative to Cultural Awareness training?
With one exception, being married or living with a partner, relative to other marital statuses, was not differentially associated with any measure of social resilience and performance, or on measures of cultural knowledge and ingroup-outgroup beliefs.

Changes in bsf by Marital Status – Model 1 (CA)

Changes in bsf by Marital Status – Model 1 (SF)

Coefficients:
Condition = -0.01, p >.9
Time = 0.03, p >.7
Married = 0.11, p >.5
Condition*Time = 0.48, p <.01
Condition* Married = -0.09, p > .7
Time* Married = 0.15, p >.3
Condition*Time* Married= -0.49, p <.05
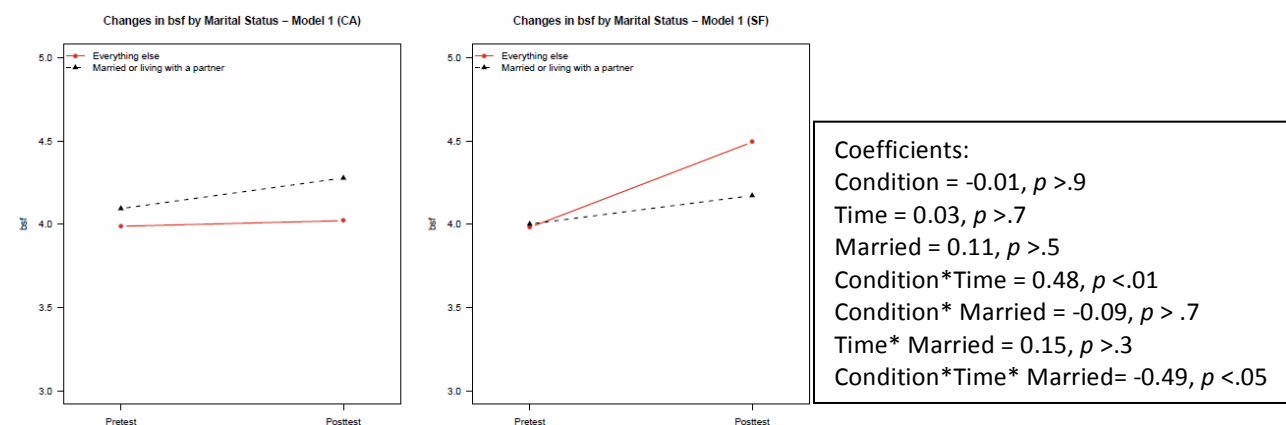
Cultural awareness: Time = 0.03, p >.7 Married = 0.12, p >.5 Time*Married = 0.15, p >.3	Social Fitness: Time = 0.51, p <.001 Married = 0.02, p >.9 Time*Married = -0.34, p <.05

As shown above, unmarried Soldiers showed a greater increase in social fitness beliefs than married Soldiers in the SF condition.

Previous deployment: *Do previously deployed Soldiers show greater improvement in social fitness than those never before deployed?*
Previous deployment was not differentially associated with any measure of social resilience and performance, or on measures of cultural knowledge and ingroup-outgroup beliefs.

Harassment: *Do individual differences in the frequency of Platoon harassment explain differences in the effect of Social Fitness training on post-training resilience and performance?*
A three-way-interaction between condition, time, and harassment showed that harassment was a significant moderator of pre-post changes. No other measure of social resilience and performance, or of cultural knowledge and ingroup-outgroup beliefs, was differentially influenced by degree of harassment.

Organizational citizenship behaviors.

Coefficients:
Condition = -0.04, p > .7
Time = 0.06, p > .3
Harass = -0.44, p < .001
Condition*Time = 0.16, p >.1
Condition* Harass = 0.33, p < .05
Time* Harass = 0.24, p < .01
Condition*Time* Harass = -0.34, p < .05

Cultural awareness: Time = 0.06, p >.3 Harass = -0.44, p <.001 Time*Harass = 0.24, p <.01	Social Fitness: Time = 0.22, p <.05 Harass = -0.11, p >.2 Time*Harass = -0.10, p >.3
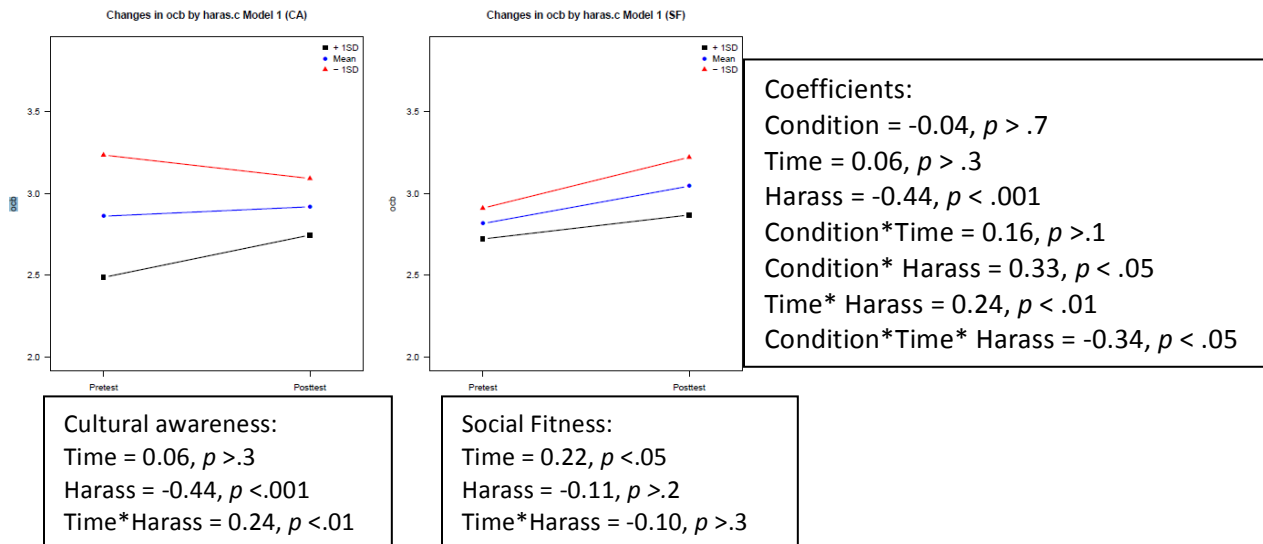
As shown in the figures above, the three-way interaction was attributable to a convergence of organizational citizenship behaviors (regression to the mean) from widely divergent pre-test levels in the CA condition (Time*Harass, p < .01), not the SF condition.

Childhood trauma: *Do individual differences in extent of childhood trauma explain differences in the effect of Social Fitness training on post-training resilience and performance?*
Childhood trauma was not differentially associated with any measure of social resilience and performance, or on measures of cultural knowledge and ingroup-outgroup beliefs.

Combat experiences: *Do individual differences in intensity of combat experiences explain differences in the effect of Social Fitness training on post-training resilience and performance?* Three-way-interactions between condition, time, and combat experience severity showed that combat experience severity was a significant moderator of pre-post changes in depressive symptoms and personal relationship satisfaction.

Depressive symptoms

Coefficients:
Condition = -0.01, *p* > .9
Time = -0.08, *p* >.06
Combat = 0.01, *p* >.6
Condition*Time = 0.04, *p* >.5
Condition* Combat = -0.001, *p*>.9
Time* Combat = 0.02, *p* <.05
Condition*Time* Combat = -0.03, *p*<.05

Cultural awareness:
Time = -0.08, *p* <.05
Combat = 0.01, *p* >.6
Time*Combat = 0.02, *p* <.01

Social Fitness:
Time = -0.03, *p* >.5
Combat = 0.01, *p* >.7
Time*Combat = -0.01, *p* >.3
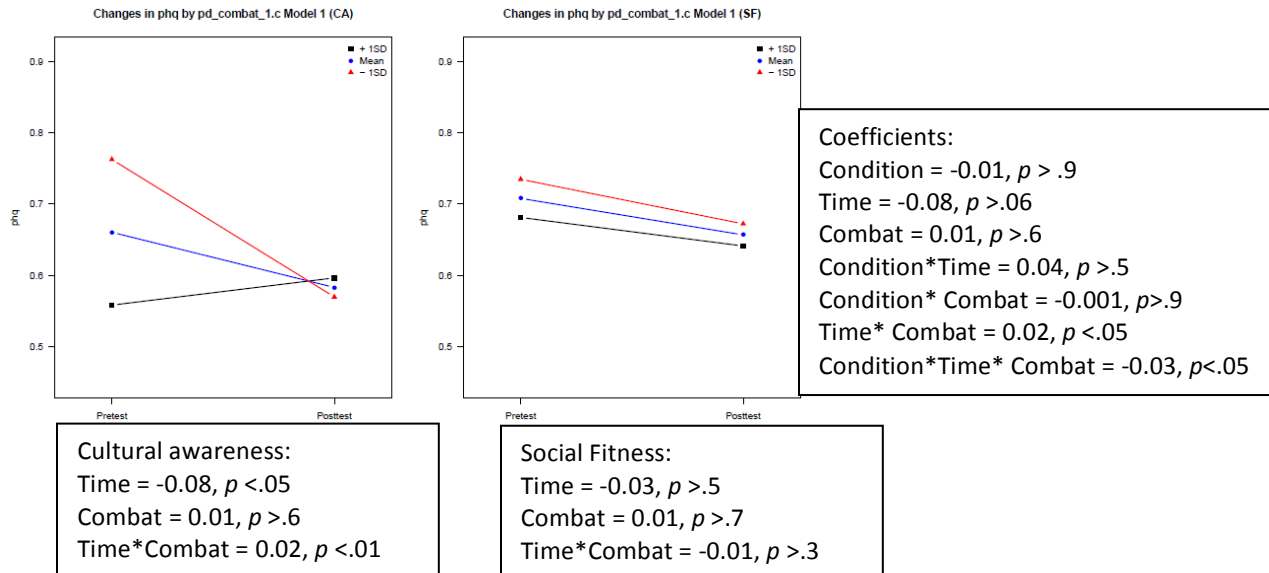
As shown in the figure above, the three-way interaction was attributable to a convergence of depressive symptom levels (regression to the mean) from widely divergent pre-test levels in the CA condition, not the SF condition. The three-way interaction was not evident for suicidal ideation, however, p > .4.

Personal relationship satisfaction

Coefficients:
Condition = -0.05, *p* > .7
Time = -0.001, *p* >.9
Combat = -0.05, *p* <.01
Condition*Time = 0.12, *p* >.2
Condition* Combat = 0.05, *p*>.1
Time* Combat = 0.04, *p* <.01
Condition*Time* Combat = -0.06, *p*< .01

Cultural awareness:
Time = 0.001, *p* >.9
Combat = -0.05, *p* <.01
Time*Combat = 0.04, *p* <.01

Social Fitness:
Time = 0.11, *p* >.1
Combat = -0.01, *p* >.7
Time*Combat = -0.02, *p* >.2
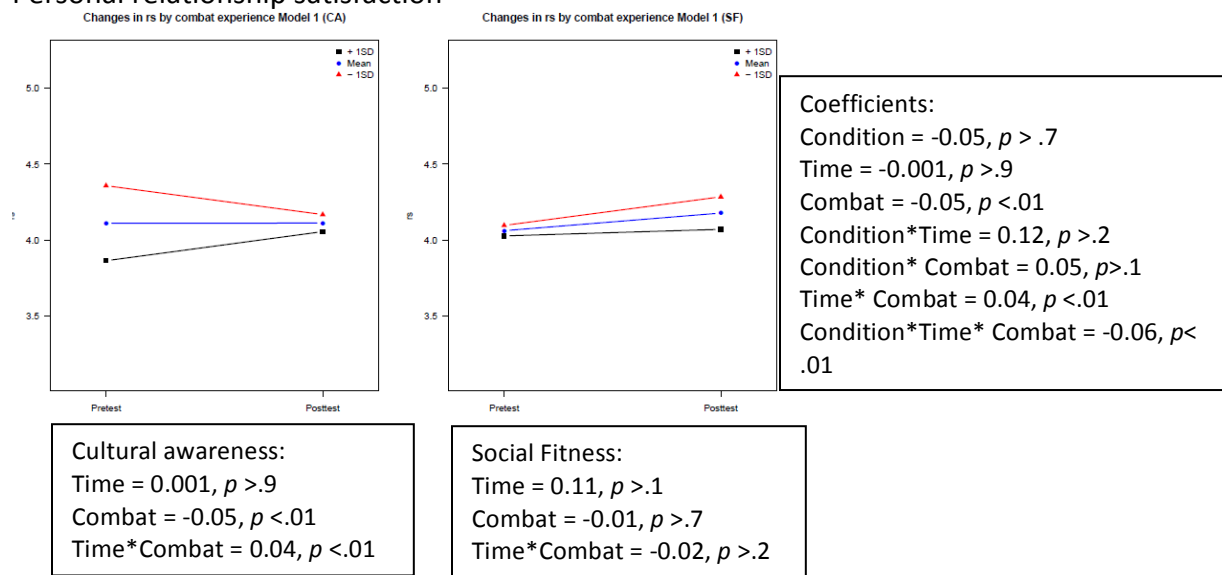
As shown in the figure above, and as was also evident for depressive symptoms, the three-way interaction was attributable to a convergence of personal relationship satisfaction levels (regression to the mean) from widely divergent pre-test levels in the CA condition, not the SF condition.

KEY RESEARCH ACCOMPLISHMENTS

1. Thanks to the cooperation and support at Fort Sill, the first wave of training and data collection was completed for the SAAT study. The sample size was smaller than expected because one of the two brigades we were to train was deployed shortly before our arrival at Fort Sill.
2. The 3 month follow-up training and assessment is scheduled for Fort Sill on 2 MAY 2013.
3. Additional data collection for the randomized clinical trial is scheduled at a second Army base, JBLM, for 3-7 JUN 2013.
4. The login through the AKO site was slow at Fort Sill, and this could constitute a serious problem with the larger number of Soldiers scheduled to be tested at JBLM. In collaboration with LTC McGurk at WRAIR and Mike Fravell and Katie Nasser at Techwerks, we have developed means for secure data collection that no longer require we go through the AKO site.
5. The analyses reported here reflect a preliminary report based on the available data. These preliminary analyses investigated and found that Social Fitness (relative to Cultural Awareness) training tended to improve Soldiers' social fitness as indexed by early measures of motivation, beliefs, and practice, but SF training did not affect outgroup hostility.
6. Preliminary analyses also tested and, consistent with hypotheses, found that Cultural Awareness (compared to Social Fitness) training increased knowledge about and decreased outgroup hostility (warmth dimension) toward Afghanis, but CA training did not affect social resilience and performance.

REPORTABLE OUTCOMES

1. The clinical trial is in progress. Therefore, we have not prepared manuscripts, abstracts, or presentations reporting the results of this work. There are no other reportable outcomes.

CONCLUSIONS

The SAAT is designed to alter the social cognition, emotion, and behavior of Soldiers and Platoons. The implementation of the SAAT study at Fort Sill went smoothly, and the Command Team at Fort Sill is supporting our return for the 3-month follow-up training and assessment. Although the sample size is small, preliminary analyses indicate that Soldiers are showing the specific benefits targeted in each branch of the clinical trial, suggesting that the improvements observed over the one-week training interval reflect the effects of the training rather than some general effect such as a placebo, response bias, or Hawthorne effect. The SF training is designed to change how Soldiers within a platoon think about and relate to one another, and such changes take effort and time to achieve a new equilibrium. Changes in norms and behavior often come at a short-term cost, as achieving this new equilibrium requires that the

extant norms, behaviors, and relationships be challenged and changed – that is, it requires social reorganization. The immediate posttest, for instance, showed that the SF training did not improve the treatment of the weakest link and may have slightly increased conflict within the platoon. Leadership through this period plays an important role in the success of any such reorganization of norms and behaviors, and facets of leadership are among the moderator variables that will be examined to determine the relative efficacy of SF at the follow-up intervals once the study has achieved adequate statistical power. The emphasis in the coming year, therefore, is to implement the SAAT study at JBLM to increase sample size and the diversity of Soldiers and Platoons in the study, and to perform the 3-month follow-up training and assessment, the 1-year follow-up survey, and the 1-year follow-up behavioral assessment in collaboration with CSF2 (MAJ P. Lester) using the Army database.

The SAAT grant period was to end 31 MAR 2014. When FORSCOM changed plans about tasking brigades to participate in the SAAT study, individuals at CSF2 and WRAIR, and the PI approached the bases where pilot research had been conducted (Fort Sill & JBLM) to ask for their support in the study. MG McDonald at Fort Sill and MG Lanza at JBLM kindly agreed, and we scheduled the study at the earliest dates possible at each base. The inevitable delays that this produced has pushed the SAAT study beyond the original end-date for the grant. Because this was foreseeable, we made adjustments in our expenditures in the Spring of 2012. These adjustments permit an extension of the work through 31 MAR 2015, permitting us to complete the proposed work, at no additional cost.

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Appendix A: Data Preparation & Analysis

Data were prepared for analysis by first determining data quality. Data quality was assessed by identifying and coding for careless and potentially unreliable responses.

1. **Detection of careless responses**

   a. Instructed responses. Since participation in SAAT was not voluntary, we sought to ensure that the responses provided by the Soldiers were valid. Meade and Craig (2012) reviewed several indicators of careless responding. Following their recommendations, we included instructed response items in the survey. These items were scattered throughout the survey and instruct the participants to select a specific response option. An example item is: "To help us monitor the quality of the data you're giving us, please select the option *agree completely*". Meade and Craig (2012) have shown that the probability to detect a careless responder by administering three instructed response items with at least five response options is close to 100%. For each participant, we counted the number of incorrect responses to this item.

At pre-test, 147 of 198 Soldiers (74.2%) correctly answered all 3 instructed response items, 32 (16.2%) answered one item incorrectly, 16 (8.1%) answered two items incorrectly, and 3 (1.5%) answered all three items incorrectly. The SF and CA conditions did not differ significantly on this measure of careless responding, -2 Log Likelihood (3) = 22.997, *p* > .5.

At post-test, 142 of 187 Soldiers (75.9%) correctly answered both instructed response items, 31 (16.6%) answered one item incorrectly, and 14 (7.5%) answered both items incorrectly. The SF and CA conditions did not differ significantly on this measure of careless responding, -2 Log Likelihood (3) = 16.805, *p* > .7.

   b. Flagged responses. In addition, we calculated three post hoc indicators of careless responding at each measurement occasion. First, we searched for systematic response patterns. For each scale and each individual Soldier, we examined whether (a) the same response option was selected for all items in that scale and (b) whether the responses followed sequences such as 1-2-3-4 or vice versa. Soldiers were assigned a *"validity flag"* for each of these types of response patterns. For (a), identical response across items may in fact reflect valid values, and it was therefore expected that this response pattern would be shown by at least some Soldiers. However, for nine critical scales with a mixture of positively and negatively worded items, internally consistent responding should not produce identical response choices. Soldiers were assigned a *"key flag"* for each of the nine scales that showed inconsistent responding across the items within the scale. The greater the total number of flags for an individual Soldier, the greater the chance that this Soldier gave biased responses.

At pre-test, performance on the validity flag criterion (*M* = 6.9, *SD* = 4.6, possible range = 0-36) did not differ between the SF (*M* = 6.6, *SD* = 3.9) and CA (*M* = 7.3, *SD* = 5.1) conditions, *F*(1, 196) = 1.189, *p* > .2. Soldiers with a total number of flagged responses in the top 10% of the

distribution were defined as potentially unreliable responders. This criterion identified 26 of 198 Soldiers (13.1%) as potentially careless responders, and this did not differ between the SF and CA conditions (11.8% vs. 14.3%, respectively), chi-square(1) = 0.261, $p > .6$. Performance on the key flag criterion was low ($M = 0.66$, $SD = 0.97$), and did not differ between the SF and CA conditions, $F(1, 196) = 0.66$, $p > .4$

At post-test, the number of validity flagged responses (possible range = 0-30) did not differ between the SF ($M = 6.8$, $SD = 4.7$) and CA ($M = 7.4$, $SD = 5.8$) conditions, $F(1, 185) = 0.546$, $p > .4$. Soldiers with a total number of flagged responses in the top 10% of the distribution were defined as potentially unreliable responders. This criterion identified 18 of 187 Soldiers (9.6%) as potentially careless responders, and this did not differ between the SF and CA conditions (7.3% vs. 11.4%, respectively), chi-square(1), = 0.895, $p > .3$. Performance on the key flag criterion was low ($M = 0.74$, $SD = 1.18$), and did not differ between the SF and CA conditions, $F(1, 185) = 0.004$, $p > .9$.

The final exclusionary criterion was defined as validity flagged responses in the top 10% of the distribution AND key flagged responses in the top 10% of the distribution (i.e., > 2 key flags) OR two incorrect responses on the instructed response items. At pre-test, 12 Soldiers' data were excluded on this basis, 8 from the CA condition (7.6%), 4 from the SF condition (4.3%), chi-square(1) = 0.954, $p > .3$. At post-test, 9 Soldiers' data were excluded on this basis, 6 from the CA condition (5.7%), 3 from the SF condition (3.7%), chi-square(1) = 0.425, $p > .5$.

2. Outliers

For each Soldier, the number of outliers (values greater than 2.5 SD's from the mean) was summed and those Soldiers whose total number of outliers exceeded the average number across all Soldiers by 2.5 SDs or more were flagged as potentially careless responders. These Soldiers' data were not excluded from analyses, however, because a pattern of extreme values across a number of scales may reflect "real" data (e.g., a high risk profile that is consistent across multiple related measures). Instead, to avoid the biasing effect of extreme outliers, all values that were 3 or more SDs above or below the mean ("extreme outliers") were truncated and replaced with the value corresponding to 3 SDs above/below the mean. The median number of outliers per subject at pretest was less than 1 (range = 0-6), and the median at post-test was 0 (range = 0-11). The mean number of extreme outliers did not differ at pretest between the SF ($M = 0.77$, $SD = 0.95$) and CA ($M = 0.91$, $SD = 1.0$) Conditions, $F(1, 120 = 0.610$, $p > .4$. Nor did the number of outliers at post-test differ between the SF ($M = 0.34$, $SD = 0.65$) and CA ($M = 0.78$, $SD = 1.9$) Conditions, $F(1, 120) = 2.489$, $p > .1$.

ANALYSES.
To account for the multilevel structure of the data, the data were analyzed with multilevel models (Time on Level 1, Soldiers on Level 2, Platoons on Level 3, Companies on Level 4, Battalions on Level 5). The main analyses employed one between-subject factor (Condition: Social Fitness vs. Cultural Awareness) and one within-subject factor (Time: Pretest vs. Posttest). For each outcome, a null model (i.e., model without predictors) was used to estimate the

proportion of variance at each level of analysis (i.e., Time, Soldier, Platoon, Company, Battalion). The intervention effect was examined by testing the cross-level interaction between *Time* (pretest vs. posttest) and *Condition* (Social Fitness vs. Cultural Awareness). For each outcome, a test of the significance of the cross-level interaction is accompanied by a graphical plot that illustrates the effect of the training. Ancillary analyses were conducted to determine whether the effects of training were robust to statistical control for demographic covariates and baseline differences between the SF and CA Conditions.

Effect sizes (Cohen's *d)* are calculated as standardized mean differences between pre- and post-training scores (post-training test score minus pre-training test score, divided by the pooled standard deviation) for the Social Fitness and the Cultural Awareness Conditions. Unless otherwise noted, the effect sizes for the dependent variables reviewed here are transformed so that positive effect sizes reflect positive resilience and performance changes (e.g., decreased response bias, increased consent, reduced loneliness, increased Platoon cohesion). We describe effect sizes as small at *d*=0.1, medium at *d*=0.3, and large at *d*=0.5, as per Cohen (1988). However, at the population level, an effect size of .05 is comparable to effective public health interventions (Fishbein, 1996).

Moderator analyses test the significance of the three way interaction between *Time, Condition,* and *Moderator*. Each significant three-way interaction is accompanied by a plot for each experimental condition and a statistical test of the two-way interaction in each condition to identify the source of differences in the effect of the training. Moderators include demographic variables (age, gender, ethnicity, education, rank, marital status, deployment history), attendance at training sessions, and degree of potentially careless responding. In addition, Platoon-level moderators are tested, including Platoon type, time of day, and trainer, as well as aggregate measures of Platoon cohesion, conflict, organizational trust, collective Platoon efficacy, perceived organizational support, organizational commitment, organizational citizenship behaviors, counterproductive work behaviors, treatment of the weakest link, and negative leadership behaviors.

Finally, analyses are repeated with Platoon as the level of analysis. We focused on outcomes with significant Level 3 variance and used individual scores aggregated within Platoon to assess the effect of training on Platoon-level perceived social fitness, loneliness, depressive symptoms, perceived stress, Platoon cohesion, and Platoon conflict. The data were analyzed with multilevel models (Time on Level 1, Platoons on Level 2, Companies on Level 3, Battalions on Level 4).

Appendix B: Baseline Differences

1. **Consenting versus non-consenting Soldiers.**

Table B1. Significant bivariate associations distinguishing consenting (N=154) from non-consenting Soldiers (N=18) with valid data at pretest.

	r	p
psf	-0.252	0.001
outlier_sum	0.233	0.002
vitality	-0.213	0.005
ocb	-0.211	0.006
mal_beliefs	0.210	0.006
ucla	0.204	0.007
big5s_es	-0.223	0.009
cmho_ar	0.198	0.009
ucla_c	-0.197	0.010
pcs_coh	-0.192	0.011
pts	-0.192	0.012
swt	-0.207	0.015
ucla_r	-0.185	0.015
pss	0.179	0.019
attend_ynYES	0.198	0.020
big5s_a	-0.197	0.021
ias_s	0.175	0.022
skill4	-0.174	0.023
skill	-0.173	0.023
ucla_i	-0.170	0.026
twl	-0.167	0.029
ct_pn	0.166	0.029
pcs	-0.157	0.040
ocom	-0.156	0.041
mood	-0.155	0.042
mlq_tf	-0.154	0.044
risk_ucla_ynYES	0.151	0.048

Note: Reference group = consenting Ss.

Correlational analyses (point-biserial or Cramer's *V*) were conducted to determine whether the consenting and non-consenting Soldiers with valid data differed in systematic ways at baseline. As shown in Table B1, relative to consenting Soldiers, non-consenting Soldiers (N=18) scored lower on perceived social fitness, vitality, organizational citizenship behaviors, emotional stability, Platoon cohesion, perspective-taking, satisfaction with training, agreeableness, social skills, supportive treatment of the weakest link, organizational commitment, mood, and "transformational" leadership. Non-consenting Soldiers scored higher than consenting Soldiers

on malingering beliefs, loneliness (and lower on each of the collective, relational, and intimate connectedness subscales), hostility, perceived stress, interaction anxiety, and childhood trauma in the form of physical neglect. Bivariate associations also indicated that non-consenting Soldiers were *more* likely to belong to the high GAT risk group and the high loneliness risk group, to be perfect attenders, to have valid data, but to have a greater number of outliers. This latter finding may reflect the very real vulnerability and risk differences between consenting and non-consenting Soldiers, as reflected also in the greater probability of their being categorized in the top quartile of loneliness scores.

2. Valid versus careless (excluded) cases

Table B2. Significant bivariate associations distinguishing consenting Soldiers with valid data (N=154) from consenting excluded Soldiers (N=21) at pretest.

	r	p
mal_beliefs	0.337	0.000
valid_3	0.328	0.000
diploma	0.284	0.000
educ	0.292	0.001
pts	-0.256	0.001
skill4	-0.245	0.001
twl	-0.229	0.002
pss	0.206	0.006
ct	0.198	0.009
ct_pa	0.191	0.011
ct_en	0.191	0.012
ct_pn	0.181	0.016
nco	0.166	0.028
pd_combat_ynYES	-0.154	0.042
ce_thre	-0.167	0.043
ucla_c	-0.153	0.043
ce_death	-0.165	0.046
size	-0.150	0.047
totaltime_sum	0.162	0.050

Note: Reference group = excluded Ss.

Correlational analyses (point-biserial or Cramer's *V*) were conducted to determine whether careless (and subsequently excluded) responders differed from non-careless responders (see Appendix A for carelessness criteria) in systematic ways at baseline. As shown in Table B2, careful responders differed significantly ($p < .05$) from careless responders in reporting greater endorsement of malingering, higher levels of education, lower perspective-taking, less likelihood of listening attentively to others in the Platoon (skill4), poorer treatment of weaker

members of the Platoon, greater stress, higher likelihood of childhood trauma (physical abuse, emotional neglect, physical neglect), less likely to have had combat experience (and threatening and death and injury-related combat experience in particular), were part of smaller Platoons, and had lower levels of collective connectedness. Careful responders were also more likely to be NCO's and spent more time completing the surveys.

3. Cultural Awareness versus Social Fitness cases.

Table B3. Significant bivariate associations distinguishing the SF from the CA condition at pretest (N=122).

	r	p
pd_help	0.287	0.002
pcs_ess	-0.239	0.008
educ	0.269	0.012
size	-0.207	0.022
mal_beliefs	0.188	0.038
pd_combat_ynNO	0.181	0.046

Note: Reference group = CA condition.

Correlational analyses (point-biserial or Cramer's *V*) were conducted to determine whether the Social Fitness and Cultural Awareness Conditions differed in systematic ways at baseline. As shown in Table B3, relative to the CA condition, Soldiers in the SF condition were more likely to have been deployed to help Afghani security forces, had lower levels of support from fellow Soldiers in their Platoon, were more educated, were part of smaller Platoons, were higher on endorsement of malingering, and less likely to have been deployed to combat.

These variables were simultaneously entered in a logistic regression model predicting Condition membership. Variables that, independent of all other predictor variables, exhibited unique associations with Condition membership (p's < .05) were subsequently included as covariates in the main analyses. The only variables to meet this criterion were Platoon size and deployment to help Afghanistan forces.

Appendix C: Training Effects as a Function of Consent and Careless Responding

1. Consenting versus non-consenting Soldiers.

The effects of SF relative to CA training did not differ substantively between consenting (N=143) and non-consenting Soldiers (N=32). However, three-way interactions (Condition*Time*Consent) were significant for social skills (b = -1.91, $p < .01$) and hostility (b = 0.52, $p < .03$), and approached significance for empathy (b = -1.85, $p = .053$). These effects are plotted below and show that SF training effects among non-consenting relative to consenting Soldiers differed in nonsystematic ways. Among non-consenting Soldiers, social skills and empathy showed a reversal where the CA condition increased relative to the SF condition, and hostility decreased in the CA condition relative to the SF condition.
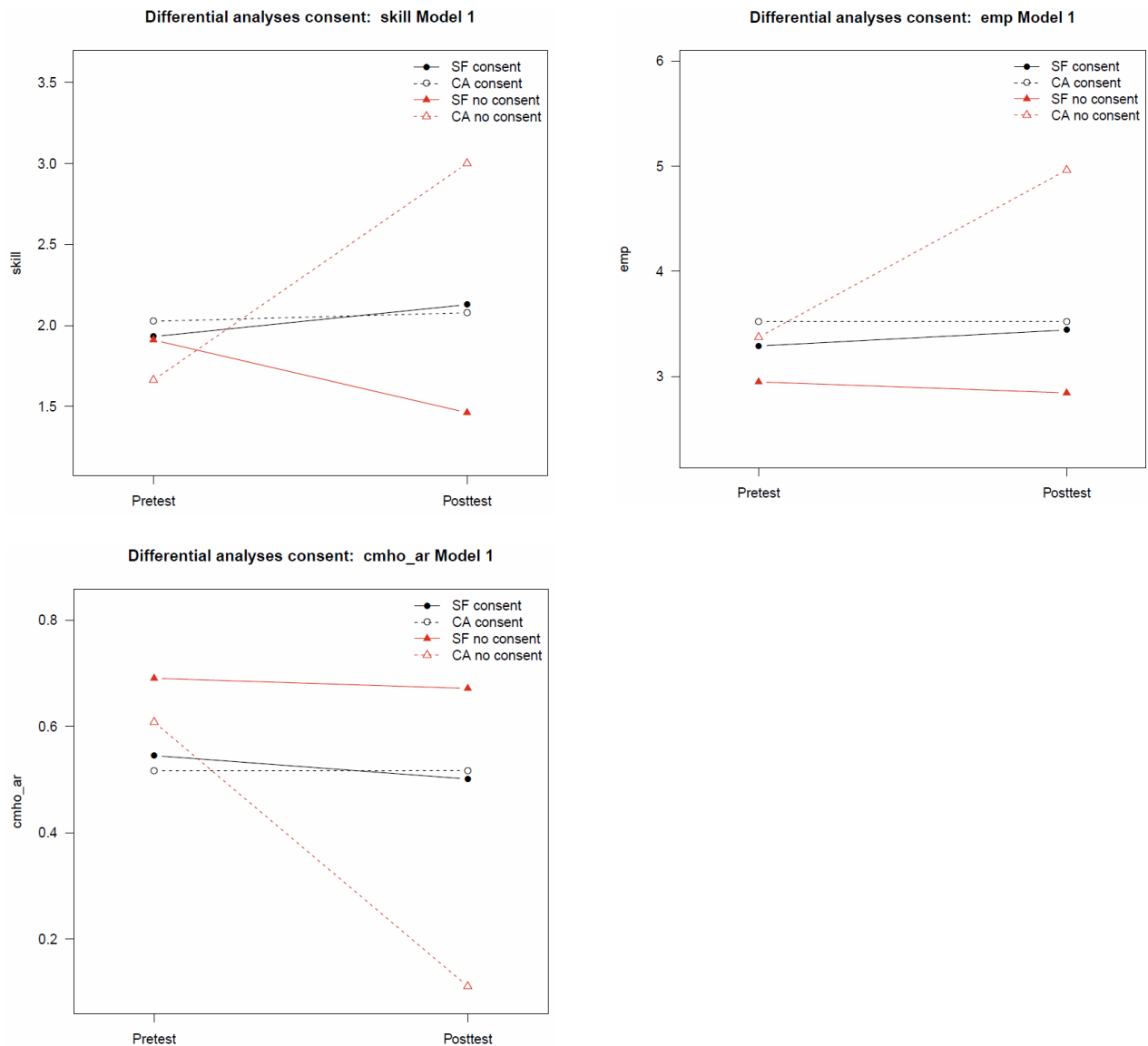
2. Valid versus careless (excluded) cases

The effects of SF relative to CA training did not differ substantively between retained (N=154) and excluded Soldiers (N=21). However, three-way interactions (Condition*Time*Exclusionary Status) were significant for beliefs in social fitness (b = 1.01, p < .05), depressive symptoms (b = -0.60, p < .05), and ratings of Afghani warmth (b = 2.40, p < .001). These effects are plotted below and show that SF training was associated a greater increase in beliefs in social fitness, and a greater decrease in depressive symptoms, in excluded than retained cases. In addition, CA training was associated with lower ratings of Afghani warmth at post-test in excluded than retained cases.
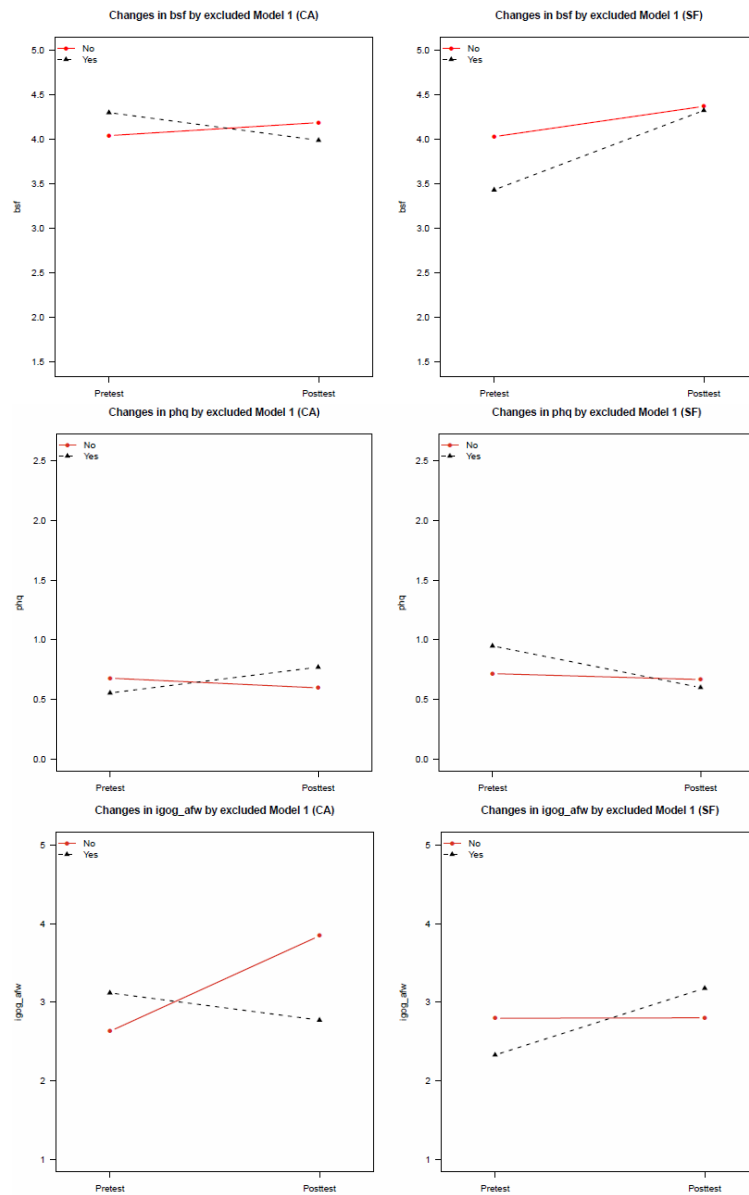
3. **Training effects as a function of degree of careless responding in retained consented cases (N=122).**

The effects of SF relative to CA training at post-test did not differ as a function of degree of careless responding for any of the outcomes reported above, p's > .1. One exception was depressive symptom (Condition*Time*KeyFlags), b =-0.29, p < .05. As shown below, the greater the degree of careless responding (i.e., the greater the number of "key flags"), the smaller the beneficial effect of training in the SF condition, where higher rates of careless responding were estimated to show an increase in depressive symptoms at post-test.
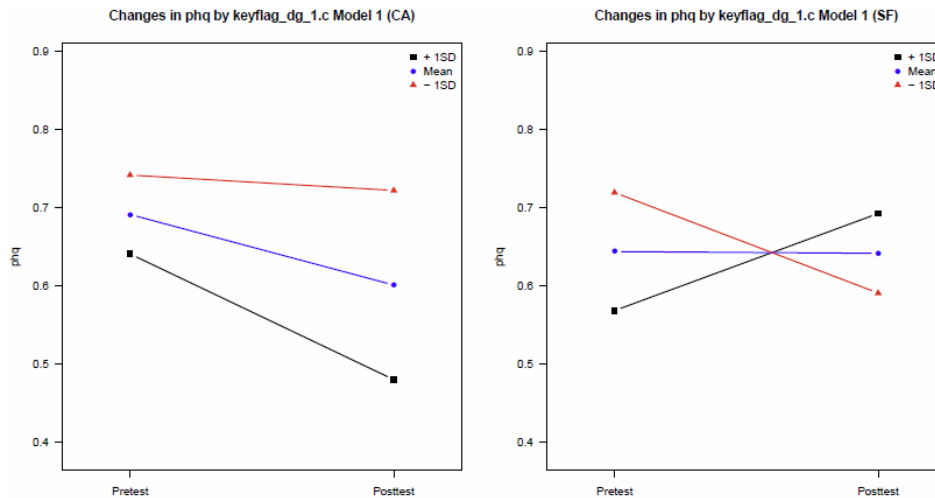
Appendix D: Ancillary Analyses

The effects of training on outcomes reported above were substantively unaltered with statistical adjustment for demographic covariates (age, gender, married or living with partner, in current serious romantic relationship, NCO status), and only social skill practice achieved statistically significant group differences with the inclusion of demographic covariates in the model, Condition*Time: $b = 0.17$, $p < .05$. In no case did demographic covariates behave as suppressor variables that when included in the model revealed significant training effects.

Inclusion of additional baseline covariates that distinguished between the SF and CA conditions (deployment to assist Afghan security forces) did not alter the post-test effects of SF relative to CA training, p's > .1.

Appendix E: Description of Measures

<u>Note</u>: In some scales, original instructions referred to the *last two weeks*. Since the pretest and posttest are conducted about a week apart (Monday and Friday, respectively), these instructions were consistently changed to the *last week*.

Social resilience measures.

1. <u>Perceived Social Fitness (PSF)</u>. Perceived social fitness refers to the confidence people have to be able to perform various social fitness behaviors. The scale consists of 15 social fitness skills that were adapted from the UCLA-R scale, the Social Intelligence Scale (Silvera, Martinussen, & Dahl, 2001), and the Perceived Social Self-Efficacy Scale (Smith & Betz, 2000). Example items are "Use my social skills and abilities for the benefit of the Platoon" and "Understand what others really mean through their expressions, body language, etc." Responses were given on a 5-point scale from 1 (no confidence at all) to 5 (complete confidence). Responses were averaged to yield a total score that ranged from 1 (low perceived social fitness) to 5 (high perceived social fitness).

2. <u>Beliefs about Social Fitness (BSF)</u>. Beliefs about social fitness are assessed with three items: "I believe that social skills can be improved through practice," "I believe that it is important for a Platoon to have a common identity," and "I believe that it is right for a Platoon to socially reject its poorly performing members." Responses are given on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and are reversed if appropriate and averaged to form a total belief score ranging from 1 (non-adaptive beliefs) to 5 (adaptive beliefs).

3. <u>Showing social skills (SKILL)</u>. One goal of the social resilience training is to teach a series of skills. To assess the degree to which the Soldiers use these skills outside the training, we selected the most important skills taught in this training. The Soldiers are asked to indicate how often they have shown 7 different behaviors in the past week by selecting one of the following response options: 0 (*never)*, 1 (*once*), 2 (*2-3 times*), 3 (*4 times or more)*. A sample item is "Took another person's perspective". The responses are summed to form a total score that ranges from 0 (never showed any of these behaviors) to 21 (showed all of these behaviors frequently).

4. <u>Perceived social isolation (UCLA)</u>. The R-UCLA Loneliness Scale is a well-validated measure of overall perceptions of isolation (and its opposite, perceived social connectedness) and degree of satisfaction with one's social network (Russell, Peplau, & Cutrona, 1980; Russell, 1996) that avoids explicit reference to terms such as "lonely" and "loneliness." Factor analysis of this scale has revealed three related dimensions, Intimate, Relational, and Collective Connectedness, that exhibit discriminant validity as revealed by their unique associations with being married, having a larger number of close friends, and belonging to more voluntary groups, respectively (Hawkley, Browne, & Cacioppo, 2005). We used a 9-item short version of the R-UCLA consisting of those items with the highest factor loadings on each of these dimensions. Examples of the items are "How often do you feel left out," "How often do you feel close to people," and "How often do you feel part of a group of friends." Each of the items is rated on a scale with response options 1 (*never*), 2 (*rarely*), 3 (*sometimes*), and 4 (*often*). After reverse

scoring appropriate items, perceived isolation scores are calculated by summing all items. The range of possible scores is 9 to 36, with higher scores signifying greater perceived isolation and, conversely, lower scores signifying greater perceived social connectedness.

5. Satisfaction with personal relationships. Satisfaction in relationships with children, parents, friends, and relatives will be assessed with 1 item for each relationship domain. For each of the four relationship domains, this item asks, "On average, how satisfied are you in your relationship with…" and is rated on a 5-point scale from 1 (*not at all*) to 5 (*very much*).

6. Satisfaction with relationships in the Platoon. Relationships in the Platoon will be assessed with 2 items: "On average, how well do you know the people in your Platoon?" and "On average, how satisfied are you with your relationships with people in your Platoon?" The response is given on a 5-point scale from 1 (*not at all*) to 5 (*very much*), and averaged across both items to signify overall satisfaction with Platoon relationships.

7. Depressive Symptoms. The PHQ-9 is the 9-item depression scale of the Patient Health Questionnaire (Spitzer, Kroenke, & Williams, 1999). It is a reliable self-report measure of depressive symptoms and depression severity (Kroenke, Spitzer, & Williams, 2001) that has diagnostic validity (Spitzer et al., 1999). The PHQ-9 is based directly on the diagnostic criteria for major depressive disorder in the Diagnostic and Statistical Manual Fourth Edition (DSM-IV). Regarding experiences "over the last week," respondents are asked to rate how often they have been bothered by problems such as, "little interest or pleasure in doing things," and "feeling down, depressed, or hopeless." Items are rated on a scale of 0 (*not at all*), 1 (*several days*), 2 (*more than half the days*), and 3 (*nearly every day*). Responses are summed to create a total score. Severity is determined categorically, where a score of 1-4 is minimal depression, 5-9 is mild depression, 10-14 is moderate depression, 15-19 is moderately severe depression, and 20-27 is severe depression. Suicidal ideation is the last item on the PHQ and is examined separately.

8. Perceived Stress. The Perceived Stress Scale (PSS) is a 10-item self-report questionnaire that has demonstrated good internal consistency and validity (Cohen, Kamarck, & Mermelstein, 1983). For economy reasons, we used a shorter 4-item version. The PSS asks respondents to indicate how often they felt or thought a certain way during a specified time period (i.e., over the last two weeks). Examples of items include, "how often have you felt that you were unable to control the important things in your life," and "how often have you felt that things were going your way." Responses to each item use a 5-point Likert-type scale that ranges from 0 (*never*) to 4 (*very often*). After reverse scoring appropriate items, scale scores are calculated by summing the responses to all items, yielding a score range of 0 (low perceived stress) to 16 (high perceived stress). Perceived stress has been associated with substance use in military men and women (Bray, Fairbank, & Marsden, 1999), whereas the ability to perceive events in less threatening ways enhances resilience (Feder, Nestler, & Charney, 2009).

9. Perspective taking (PTS). Perspective taking is one of the main skills taught in Social Fitness training. It will be assessed with four items from the perspective taking subscale of the Interpersonal Reactivity Index developed by Davis (1980). A sample item is, "I believe that there are two sides to every question and believe I should try to look at

them both." Responses are given on a 5-point scale ranging from 1 (*do not agree at all*) to 5 (*agree completely*). Responses are averaged to form a total perspective taking score that ranges from 1 (low perspective taking) to 5 (high perspective taking).

10. <u>Hostility</u>. The Cook–Medley Hostility Scale (CMHo) is a 50-item measure derived from the MMPI (Cook & Medley, 1954). We will use a 9-item version of this measure (Barefoot et al., 1989) that assesses the subscale aggressive responding. Preliminary analyses using a sample of older adults have shown that this subscale is most likely to change in response to major life events. A sample item is "I have at times had to be rough with people who were rude or annoying." For each item, respondents are asked to indicate whether the statement is true (1) or false (0). After reverse scoring appropriate items, responses are summed to generate a total hostility score for each participant. Scores range from 0 (low hostility) to 9 (high hostility). Hostility measured with the 27-item scale or the cynical hostility subscale has been associated with PTSD in Vietnam veterans (Beckham et al., 1996; Kubany, Denny , Gino, & Torigoe, 2006).

11. <u>Empathy</u>. Four items from the Empathic Concern subscale of the Interpersonal Reactivity Index developed by Davis (1980) serve as our measure of empathy. Example items are "I often have tender, concerned feelings for people less fortunate than I am" and "Other people's misfortunes do not usually disturb me a great deal". Responses are given on a 5-point scale ranging from 1 (*do not agree at all*) to 5 (*agree completely*). Responses are averaged to form a total empathy score that ranges from 1 (low empathy) to 5 (high empathy).

12. <u>Interaction Anxiety</u>. The Interaction Anxiousness Scale is a 15-item self-report questionnaire that assesses social anxiety in "contingent" (i.e., interpersonal) interactions (Leary, 1983). Three items will be used in the present project, and examples include "I seldom feel anxious in social situations," and "I often feel nervous even in casual get-togethers." Responses to each item are made on a 5-point Likert-type scale that ranges from 0 (*not at all like me*) to 4 (*extremely like me*). After recoding reverse scored items, responses are summed across items, yielding a score range of 0 (low interaction anxiousness) to 12 (high interaction anxiousness). The full scale has good construct validity, internal consistency (alpha's > .84), and test-retest reliability (0.8 over an 8-week interval) (Leary, 1983). Social anxiety has been associated with PTSD, an association that has been attributed to the depressive symptomatology that accompanies PTSD (Hofmann, Litz, & Weathers, 2003). Social anxiety has also been associated with diminished hedonic functioning (e.g., energy, liveliness, satisfaction with life, curiosity) independent of various depressive and other anxiety symptoms (Kashdan, 2007).

13. <u>Mood</u>. Mood in the past work week was assessed with the following item: "On average, how would you describe your mood in the last work week?". Responses were given on a 11-point scale ranging from 0 (extremely unpleasant) to 10 (extremely pleasant). The unpleasant-pleasant dimension is used frequently in mood measures (e.g., Diener et al., 2010; Russell, Weiss, & Mendelsohn, 1989). The 11-point response format is used frequently in single-item measures of subjective well-being (Lucas & Donnellan, 2012).

14. <u>Sleep Quality</u>. Sleep quality is assessed by asking a single question taken from the Pittsburgh Sleep Quality Index (Buysse et al., 1989): "During the past work week, how

would you rate your sleep quality overall?" Response options are very good, fairly good, fairly bad, and very bad. Low sleep duration and/or quality have been associated with altered hormonal responses (Tyyskä, Kokko, Salonen, Koivu, & Kyröläinen, 2010), with impaired academic performance in military relevant training (Estrada, Balkin, Wildzunas, Rouse, & Killgore, 2009), and appears to have played a role in a friendly fire accident (Wesensten, Belenky, & Balkin, 2006). Perceived social isolation has been shown to impair sleep quality and decrease daytime functioning (Hawkley, Preacher, & Cacioppo, 2010) and is thus a reasonable intervention target to diminish threats to performance.

15. Catastrophizing. The tendency to explain bad events in a pessimistic way (i.e., to catastrophize) will be assessed with four items drawn from the Attributional Styles Questionnaire (Peterson & Villanova, 1988) that are a subset of the seven items asked in the GAT. Sample items include, "When bad things happen to me, I expect more bad things to happen," and "When I fail at something, I give up all hope." Items are rated on a 5-point scale from strongly agree to strongly disagree. In a study of patients with chronic pain, coping scores significantly and independently predicted physical disability, but not depression, whereas catastrophizing independently predicted depression, but not physical disability (Turner, Jensen, & Romano, 2000). In addition, individuals high in the tendency to catastrophize appear to prefer potentially hazardous settings and risky activities, possibly to alleviate their negative mood (Peterson et al., 2001).

16. Generalized Trust. Trust in people will be assessed using the first three items from Rosenberg's Faith in People Scale (Rosenberg, 1956) that have been used by the Michigan Survey Research Center (1969). These items are presented in a forced-choice format: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?," "Would you say that most of the time, people try to be helpful, or that they are mostly just looking out for themselves,?" and "Do you think that most people would try to take advantage of you if they got the chance or would they try to be fair?" Responses are summed resulting in scores that range from 0 (low trust) to 3 (high trust). Inter-item correlations exceed .48 and hold at a similar magnitude for people with low levels of education (Wrightsman, 1991).

Relationship measures obtained at baseline and at longer-term follow-up (3- or 12-month)

17. Social integration. A structural social network measure will be administered to evaluate the size and diversity of soldiers' social networks (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997). Social network size is the total number of people with whom the respondent has regular contact (i.e., at least every two weeks) and for this military sample will include children, parents, other relatives, close friends, and fellow church members. Each of these relationship domains represents a social role, and social network diversity is the sum of roles in which the participant has regular contact with at least one person. Smaller social network size and diversity have been associated with greater perceived social isolation (Pressman, Sheldon, Miller, Barkin, Rabin, & Treanor, 2005; Hawkley, Hughes, Waite, Masi, Thisted, & Cacioppo, 2008).

18. Marital status. Marital status prior to SAAT will be obtained from the Army database. Changes in soldier's marital status subsequent to SAAT will be monitored by asking for current marital status at pre-deployment, in theater, and post-deployment. Changes in

marital status are a potential stressor that may moderate soldiers' resilience while deployed.

19. Partner status. The Soldiers are asked to indicate whether they are currently in a serious relationship. Relationship status is distinct from marital status as it is possible to be single (in a legal sense) or divorced and have a significant other at the same time.

20. Marital satisfaction. The Couples Satisfaction Index (CSI) assesses marital quality with a higher degree of precision than existing marital satisfaction scales (e.g., Dyadic Adjustment Scale; Marital Adjustment Test) and strong convergent and construct validity (Funk & Rogge, 2007). IRT analyses applied to the items indicated that a 4-item version of this scale is sufficient to rival the information provided by the much longer Dyadic Adjustment Scale, has excellent internal consistency (alpha = .94), and correlates highly with other marital satisfaction scales (*r*'s >.87) (Funk & Rogge, 2007). The first of these four items is a question about "the degree of happiness, all things considered, of your relationship," and is rated on a 7-point scale from 0 (*extremely unhappy*) to 6 (*perfect*). The remaining three items (warm and comfortable relationship, rewarding relationship, satisfaction with relationship) are rated on 6-point scales from 0 (*not at all true*) to 5 (*completely true*). Responses are summed across all items to create a total marital satisfaction score that ranges from 0 to 21.

21. Communication with friends and family. Frequency of and satisfaction with communication with friends and family by phone and internet was assessed with four items such as "On average, how often do you communicate with your friends and family by phone?" and "How satisfied are you with the communication by internet?" The response format for the frequency items ranged from 0 (*never*) to 4 (*every day*). The response format for the satisfaction items ranged from 1 (*not at all*) to 5 (*very much*).

Performance measures.

1. Platoon cohesion and support. Platoon cohesion will be assessed using items from two sources. The first is a 3-item cohesion scale adapted from Podsakoff & MacKenzie (1994) for a military sample and used by the Walter Reed Army Institute of Research. The items are, "The members of my unit are cooperative with each other," "The members of my unit know that they can depend on each other," and "The members of my unit stand up for each other." The second source derives from Griffith (2002) and includes two items assessing emotional support from leaders (e.g. "My superiors make a real attempt to treat me as a person") and two items about emotional support from fellow soldiers (e.g., "I can go to most people in my Platoon for help when I have a personal problem"). All seven items are rated on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Responses are summed to generate a Platoon cohesion score. Social cohesion in a military sample has been associated with a lower likelihood of psychological distress (Ahronson & Cameron, 2007). Cohesion has also been associated with enhanced military performance (Oliver, Harman, Hoover, Hayes, & Pandhi, 1999), and low levels of social support from buddies have been associated with higher levels of loneliness and greater combat stress reactions (Solomon, Mikulincer, & Hobfoll, 1986).

2. Platoon conflict. Internal group conflict will be measured with a 4-item scale used in research with military samples (Spector & Jex, 1998). Sample items include, "How often

do people in your unit get into arguments with each other?" and "How often do people in your unit do bad things to each other?" Items are rated on a 5-point scale in terms of frequency, from 1 (never) to 5 (very often). Responses are summed to generate a total conflict score that ranges from 4 (low conflict) to 20 (high conflict). Higher levels of interpersonal conflict in a military sample have been associated with lower affective and continuance commitment to the military (Thomas, Bliese, & Jex, 2005).

3. Organizational Trust. This scale consists of 5 items that are military adaptations by Col. Patrick Sweeney (Sweeney, Thompson, Blanton, 2009) of organizational trust scales (Mayer & Davis, 1999; Mayer, Davis, & Schoorman, 1995). These items are employed in the GAT. Sample items include, "My immediate supervisor has much knowledge about the work that needs to be done," "I think we are better trained than most other Platoons in the company," and "I trust my fellow Soldiers in my Platoon to look out for my welfare and safety." Items are rated on a 5-point scale from strongly disagree to strongly agree. Responses are summed across items to generate a total trust score that ranges from 5 (low trust) to 25 (high trust).

4. Leadership Quality. An abbreviated 10-item version of the 24-item Multidimensional Leadership Quality scale (MLQ; Avolio & Bass, 2009) was generated by selecting two high-loading items on Charisma/Inspirational (CH) leadership, Contingent Reward (CR) leadership, and Management by Exception-Active (MBEA) leadership (Avolio & Bass, Table 3, p. 56). For these and the Intellectual Stimulation (IS) and Individualized Consideration (IC) subscales, face validity and ease of comprehension helped to guide the choice of two items for each. Items are rated on a 5-point scale (not at all to frequently or always) regarding frequency with which soldiers observe their first line supervisor display each behavior. Measurement model analyses (Avolio & Bass, 2009) have shown that a higher-order Transformational Leadership factor encompasses CH and IS components, a Developmental/Transactional leadership encompasses CR and IC components, and a Corrective Avoidant factor that encompasses MBEA and Laissez-Faire (not measured in the present project) leadership components. Factor scores will be calculated accordingly.

5. Leadership behaviors. Three negative leadership behaviors will be assessed by having soldiers rate their first line supervisor. The negative behaviors are drawn from the corresponding scale used by the Walter Reed Army Institute for Research that asks, for example, how often "your supervisor embarrasses Platoon members in front of other Platoon members." Items are rated on a 5-point scale from 1 (never) to 5 (always). Responses are summed across items to generate a negative leadership behaviors score that ranges from 3 (infrequent negative leadership behaviors) to 15 (frequent negative leadership behaviors).

6. Collective Platoon efficacy. Collective efficacy refers to people's shared beliefs in their collective capacity to achieve desired outcomes (Bandura, 2006). The collective efficacy of the Platoon will be assessed by adapting 5 items from the family efficacy scale (Bandura, 2006) for administration to soldiers about their Platoon. Soldiers will be asked to rate how confident they are that their Platoon, working together as a whole, can, for example, "resolve conflicts among Platoon members," and "support each other in times of stress." Furthermore, the item "develop a strong identity" was added. The response

scale ranges from 1 (not at all confident) to 5 (highly confident). Responses are summed to create a total collective efficacy score that ranges from 6 (low collective Platoon efficacy) to 30 (high collective Platoon efficacy). Members' appraisals of their Platoon's abilities will be aggregated within Platoons to measure perceived collective Platoon efficacy.

7. <u>Perceived organizational support</u>. The Perceived Organizational Support scale (Eisenberger & Huntington, 1986) was adapted to generate a 3-item scale that consisted of the most highly loading items. Soldiers will be asked to what degree they disagree or agree with statements about the Army as the organization for which they now work. Sample items are, "The Army cares about my general satisfaction at work," and "The Army is willing to extend itself in order to help me perform my job to the best of my ability." Items are rated on a 5-point scale (strongly disagree to strongly agree) and, after reverse-coding appropriate items, responses are summed to create a total score that ranges from 3 (low perceived organizational support) to 15 (high perceived organizational support). Perceived organizational support has been linked with greater affective commitment to the organization and improved performance (Eisenberger, Fasolo, & Davis-LaMastro, 1990).

8. <u>Organizational Commitment</u>. Organizational commitment is defined as a combination of affective, continuance, and normative commitment (Meyer & Allen, 1997). Each represents a motive for remaining with and performing for an organization (Gade, 2003). For the purposes of this project, only affective commitment will be assessed. Affective commitment represents an emotional attachment to or identification with the military service or unit and will be assessed with four items from Allen & Meyer (1990), such as, "I do not feel a strong sense of belonging in the Army" [reverse-coded]. All items are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). After recoding reverse-scored items, responses are summed to yield a total Affective Commitment score.

9. <u>Organizational Citizenship Behaviors</u>. Organizational citizenship behaviors (OCBs) are discretionary behaviors that are not directly or explicitly recognized by leadership but that enhance the effectiveness and efficiency of teams and organizations. OCBs entail behaviors from different domains, including altruism, courtesy, conscientiousness, sportsmanship, and civic virtue (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). For this study, we adapted five items from the military version (Deluga, 1995) of the 24-item OCB scale by Podsakoff et al. (1990). For each of the above five mentioned domains, one item was selected based on factor loading and face validity. Sample items are, "Members of my Platoon obey rules and regulations even when no one is watching," and "Members of my unit perform duties that are not mandatory, but are considered important." Items are rated on a 4-point scale from 1 (*very unlikely*) to 4 (*very likely*). Responses are reversed if appropriate and summed to create a total score on OCBs. Ehrhart et al. (Ehrhart, Bliese, & Thomas, 2006) found that helping behaviors exhibited substantial within-group agreement (r = .87), and differed fairly reliably between groups (ICC(2) = .69). Unit-level helping behavior was related to unit effectiveness (unit-level physical fitness, award rate, M16 marksmanship) beyond what was explained by unit cohesion, unit conflict, and leadership effectiveness (Ehrhart et al., 2006).

10. <u>Counterproductive Work Behaviors</u>. Counterproductive work behaviors (CWBs) are discretionary behaviors that harm or intend to harm the effectiveness and functioning of an organization. CWBs will be assessed at the Platoon-level with a 6-item scale used by Dalal et al. (2009) that asks, for example, how likely it is that Platoon members "behave in an unpleasant member toward other Platoon members," and "speak poorly about other Platoon members." Items are rated on a 4-point scale from 1 (*very unlikely*) to 4 (*very likely*). Dalal et al. (2009) found that helping behaviors and counterproductive behaviors were independent of each other and each explained unique variance in job performance.

11. <u>Treatment of weakest link</u>. We used two items probing soldiers' attitudes toward helping versus punitive behaviors. Specifically, soldiers will be asked the extent to which they agree with the statements, "It is right for a Platoon to socially isolate its poorly performing members," and "It is right for a Platoon to commit time to help its poorly performing members." All items are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). After recoding the reverse-scored item, responses are summed to yield a total score ranging from 2 (low approval of punitive treatment) to 10 (high approval of punitive treatment).

12. <u>Hardiness</u>. Hardiness, as defined by Kobasa (1979), is a tendency to feel (a) committed to and involved in daily life, (b) in control of the events of one's life, and (c) challenged by change, and the anticipation of change, as an exciting opportunity for personal growth. Each of these components of hardiness will be assessed with two items drawn from the military hardiness scale developed by Adler & Dolan (2006). For instance, a sample commitment item is, "How well I do in my job matters a great deal to me;" a control item is, "I feel that what I am doing is important for accomplishing my unit's mission;" and a challenge item is, "I strive as hard as I can to be successful in my work." All items are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*), and responses are averaged to yield a total hardiness score.

13. <u>Malingering beliefs</u>. A two-item measure was devised to assess soldiers' malingering beliefs. The two items are, "It is acceptable to seek medical care in order to avoid duties that are difficult, unpleasant, or dangerous," and "It is acceptable to go on sick call for minor medical problems that I could handle myself." Items are rated on a 5-point scale from strongly disagree to strongly agree and averaged to form a total score of malingering beliefs.

14. <u>Intent to Re-enlist</u>. Career intentions will be probed at three occasions (baseline, pre-deployment, post-deployment) with a single item as has been done in prior research in military samples (Huffman, Adler, Dolan, & Castro, 2005). This items asks, "Which best describes your current career intentions?" and the options are 'definitely stay in until retirement,' 'probably stay in until retirement,' 'definitely stay in beyond my present obligation, but not necessarily until retirement,' 'undecided about whether to stay after completion of my current obligation,' probably leave upon completion of my current obligation,' and 'definitely leave upon completion of my current obligation.'

Objective measures of performance. These data are obtained from the Platoon leader and from the Army database through Techwerks staff and include data on Soldiers' military performance and behavior.

At each assessment:
15. Physical fitness. Physical fitness test results will be obtained from the Army database at each available measurement occasion.
16. Drug screen. Urine drug screen results will be obtained from the Army database at each available measurement occasion.
17. Medical visits (i.e., number and nature). The number and nature of medical visits will be obtained by accessing records such as the ICD-9 (International Classification of Diseases, 9th revision) in the Army database.
18. Medical profile. The Army database will be accessed to obtain information on soldiers' physical profile (i.e., PULHES). The 'P' refers to general physical capacity, 'U' refers to functioning of upper extremities, 'L' to lower extremities, 'H' for hearing and ears, 'E' for eyes, and 'S' for psychiatric status (e.g., type, severity, and duration of psychiatric symptoms or disorder at the time the profile is determined). Numerical designations indicate level of functional capacity.
19. Impulsive behaviors. The Army database will be accessed to obtain information on Soldiers' drug and alcohol reprimands (i.e., Adverse Actions).
20. Suicide. The Army database will be accessed to obtain information on suicides and attempts.

At post-MRX (pre-deployment):
21. MRX Platoon-level performance metrics. For deploying troops, the Platoon officer will be asked to supply MRX performance metrics for each of his Soldiers.

At baseline and at 12-month follow-up/post-deployment:
22. Selection for Special Status. The Army database will permit us to determine whether Soldiers were selected for special status awards such as nomination to the Sergeant Audie Murphy Club.
23. Promotions. The Army database will provide information on Soldiers' promotions.
24. Awards. At baseline and at 12-month follow-up/post-deployment, the Army database will permit us to determine whether Soldiers' received expert infantry and airborne/air assault awards.

Health & well-being measures. These are self-reported data regarding Soldiers health-related thoughts, feelings, behaviors, and symptoms.
25. Self-rated health: Physical & Emotional. The single-item self-report measure of overall physical health in the SF-36 (Hays, Sherbourne, & Mazel, 1993) will be supplemented with an item that refers specifically to overall emotional health. Both items are rated using the response options, excellent, very good, good, fair, and poor. Among military service members, fair or poor self-rated health predicted an increased risk for hospitalization, ambulatory care visits, and administrative visits (Trump, 2006).
26. Bodily pain. Two items from the RAND version of the SF-36 (Hays, Sherbourne, & Mazel, 1993) assess bodily pain. The first, "How much bodily pain have you had during the past 2 weeks?" is answered on a scale from 0 (*none*) to 5 (*very severe*). The second asks, "During the past 2 weeks, how much did pain interfere with your normal work?" and is

answered on a scale from 0 (*not at all*) to 4 (*extremely*). Responses are standardized before summing to create an overall pain index.

27. Alcohol Misuse. The Two-Item Conjoint Screen (TICS; Brown, et al., 1997) will be used to assess alcohol misuse during the past two weeks. The first question asks, "Have you used alcohol more than you meant to?" and the second question asks, "Have you felt you wanted or needed to cut down on your drinking?" with yes or no as response options. For better sensitivity and specificity, alcohol misuse is judged present only if both items are endorsed.

28. Vitality. Four items from the RAND version of the SF-36 (Hays, Sherbourne, & Mazel, 1993) assess vitality. These items (e.g., "During the past 2 weeks, how much of the time did you have a lot of energy?") are rated on a 6-point scale (all of the time, most of the time, a good bit of the time, some of the time, a little of the time, and none of the time). Responses are reverse-coded where appropriate and then summed to create a total vitality score that ranges from 4 (low vitality) to 24 (high vitality).

29. PTSD Symptoms. The PTSD Checklist – Military version (PCL-M) is a validated 17-item self-report questionnaire (Weathers & Ford, 1996). In a study of motor vehicle accident and sexual assault victims, scores on the PCL correlated highly with the Clinician-Administered PTSD scale (CAPS; r = .93), and exhibited diagnostic efficiency of 0.900 versus CAPS (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). Respondents are asked to rate, on a 5-point scale (not at all, a little bit, moderately, quite a bit, and extremely), the degree to which a stressful military experience has elicited problems and complaints such as, "repeated, disturbing memories, thoughts, or images of a stressful military experience," and "feeling distant or cut off from other people." At baseline, the 17-item version was only administered to those Soldiers who had previously been deployed. All Soldiers, regardless of previous deployment, complete a 4-item short version of the PTSD scale at both the baseline and the post-deployment assessments. In the short version, the participants rate whether or not they had experienced any of the four symptoms (0 = no, 1 = yes). The responses were summed to create a total score that reflected the number of endorsed symptoms.

30. Life Satisfaction. Life satisfaction was assessed with the following item: "All things considered, how satisfied are you with your life as a whole?" Responses were given on a 11-point scale ranging from 0 (*totally dissatisfied*) to 10 (*totally satisfied*). This item is used in large-scale panel studies such as German Socio-Economic Panel Study (SOEP) and the Household, Income, and Labour Dynamics in Australia study (HILDA) and has shown to be sufficiently reliable with reliability estimates > .70 (Lucas & Donnellan, 2012).

31. Benefit-finding. Benefit-finding refers to the perception that one has undergone significant positive changes as a result of a challenging or traumatic life event. The Perceived Benefits scale developed by Britt et al. (Britt, Adler, & Bartone, 2001) was modified to create a 6-item measure of benefit-finding. Sample items are, "This deployment has made me more confident in my abilities," and "I feel pride from my accomplishments during this deployment." Items are rated on a 5-point scale from strongly disagree to strongly agree. Responses are summed to create a total benefit-finding score that ranges from 6 (low perceived benefits) to 30 (high perceived benefits).

Cultural awareness measures.

1. Knowledge about Afghanistan / Cultural Awareness. Knowledge about Afghanistan was assessed to evaluate the effectiveness of Cultural Awareness training. The scale consists of 5 multiple-choice items tapping into different aspects of Afghani culture, economy, and religion that were taught Soldiers in the Cultural Awareness Condition. Each item was presented along with four possible answers, including one correct and three incorrect answers. An example item is "Which principle underlies all the pillars of Pashtunwali?" The four response options were *Sunnah*, *Purdah*, *Honor* (correct answer), and *Charity*. The number of correct answers is calculated to yield a total score that ranged from 0 (poor knowledge) to 8 (excellent knowledge).

2. Outgroup Prejudice. Soldiers were asked to rate Afghanis and Americans with respect to their perceived level of warmth and competence, dimensions that have been observed in prior research to characterize the dimensions along which cultural biases typically exist (Fiske, Cuddy, & Glick, 2007). The six items were adapted from Collange, Fiske, & Sanitioso (2009). Example items for warmth are "sincere" and "warm"; example items for competence are "intelligent" and "competent." Participants indicated the degree to which these adjectives describe Afghani people and American people on a 5-point scale from 1 (does not describe Afghani/American people at all) to 5 (describes Afghani/American people very well). The responses were summed separately for the two dimensions and for Americans and Afghani to yield four total scores (perceived warmth of Afghanis, perceived warmth of Americans, perceived competence of Afghanis, perceived competence of Americans) that range from 3 (low warmth/low competence) to 15 (high warmth/high competence). For each dimension, the total score for the Afghanis was subtracted from the total score of the Americans to yield a score that reflects similarity between these two groups. Greater difference scores reflect greater dissimilarity and greater outgroup prejudice in terms of perceived warmth and competence.

Measures of stress exposure.

1. Stressful Life Events: Post-deployment. The Deployment Risk and Resilience Inventory (King, King, & Vogt, 2003) provides a 17-item measure of life events that respondents might have experienced since returning from deployment. The events include, for example, mental illness of someone close, death of someone close, one's own divorce, serious operation, stressful legal problems, and being unemployed. "Yes" responses are summed across items to generate a total score of 0 to 17, with higher scores indicating greater exposure to post-deployment stress.

2. Previous Deployment. Soldiers were asked how many times they have been deployed, and how many times they have been deployed to a combat zone. Responses were given on a 9-point scale ranging from 0 to 8 times or more. Additional information on deployment history will be retrieved from the Army Database.

3. Combat Experiences. The 33-item Combat Experiences Scale (CES) will be adapted to generate a 29-item scale that provides a global assessment of seven types of combat exposure. The scale items for the six categories are summarized in Wilk et al. (2010). Examples by category are: fighting (e.g., "receiving small arms fire"), killing (e.g., "being

directly responsible for death of an enemy combatant"), threat to oneself (e.g., "IED/booby trap exploded near you"), death/injury of others (e.g., "seeing dead bodies or human remains"), atrocities (e.g., "witnessing brutality/mistreatment toward non-combatants"), and positive experiences (e.g., "saved the life of a soldier or civilian"). For each of the six categories, soldiers are asked to endorse (Yes/No) all the experiences that apply. "Yes" responses are summed to generate a total number of combat experiences within each category and across categories.

4. Harassment. The Deployment Risk and Resilience Inventory (King, King, & Vogt, 2003) provides a 14-item measure of general and sexual harassment within units. We will administer 7 items that assess general harassment (e.g., "unit leaders or other unit members tried to make my job more difficult to do"). Each item is rated on frequency during the past month: 1 (*never*), 2 (*once or twice*), 3 (*sometimes*), or 4 (*many times*). Responses are summed across items to generate total general harassment scores that range from 7 to 28 (higher scores are indicative of greater harassment).

5. Childhood Trauma. A 25-item version of the Childhood Trauma Questionnaire (Bernstein et al., 2003) was adapted to generate a n eight-item scale that provides a global assessment of four types of childhood maltreatment – physical neglect ("My parents were too drunk or high to take care of the family"), emotional neglect (e.g., "People in my family did not look out for each other"), emotional abuse (e.g., "I thought that my parent wished I had never been born") and physical abuse (e.g., "I got hit so hard by someone in my family that I had to go see a doctor or go to the hospital"). For each category of experiences, respondents are asked to rate how often, overall, they experienced the corresponding group of items on a 5-point scale from 1 (*never true*) to 5 (*very often true*). Scores on this scale have been associated with more psychological symptoms (e.g., somatic, obsessive, psychotic, hostile) in male and female soldiers as measured using the Brief Symptom Inventory (Rosen & Martin, 1996).

Measures of disposition.

1. Global Assessment Tool (GAT)*.* Soldiers' scores on the GAT completed prior to being enrolled in the study were obtained from the Army database. As part of the Comprehensive Soldier Fitness program, the GAT assesses Soldier Fitness in four dimensions: family, emotional, spiritual, and social. Each user receives a score in each domain that is the average value across all questions in that domain. Scores are averaged across domains to assign risk status. Soldiers whose scores fall in the bottom 25% of scores are deemed at high risk of negative outcomes.

2. Personality. The "Big 5" personality traits of extraversion, agreeableness, conscientiousness, openness, and neuroticism (Goldberg, 1992) will be measured using an abbreviated 10-item scale that exhibits good content validity (Gosling, Rentfrow, & Swann, 2004). Adjective pairs, such as "critical, quarrelsome," "anxious, easily upset," and "sympathetic, warm" are rated on a 7-point scale from 1 (*disagree strongly*) to 7 (*agree strongly*). After recoding reverse scored items, values are averaged across the two item pairs that constitute each trait. Scores therefore range from 1 (low level of trait) to 7 (high level of trait). Personality variables have been shown to predict training performance in Navy students (Driskell, Hogan, Salas, & Hoskin, 1994), and

agreeableness and conscientiousness were significant prospective predictors of leader performance over a 4-year interval in a study of West Point cadets (Bartone, Snook, Tremble, & Trueman, 2002). A prospective study found that exposure to PTSD-related traumatic events was not random in a sample of 21-30 year-olds in a large health maintenance organization; rather, both neuroticism and extraversion predicted increased likelihood of exposure to traumatic events and therefore increased risk for PTSD (Breslau, Davis, & Andreski, 1995). The five personality traits are correlated with numerous aspects of job performance, including team and dyadic performance in task and social settings, altruism, and compliance (Sinclair & Tucker, 2006).

Demographic measures.

The Army database releases de-identified data on Soldier's demographic characteristics.
1. Age
2. Gender
3. Race
4. Education
5. Rank
6. MOS
7. Master Resilience Training. Soldiers are asked whether they have received Master Resilience Training (yes/no).

SAAT evaluation measures.

1. Consent. For Army purposes, all data are used to determine training efficacy. For research purposes, only those data are used that Soldiers have agreed to release. At each assessment, Soldiers were asked whether they are willing to release their data for research purposes.
2. Satisfaction with training. Satisfaction with the training is assessed using the item "Overall, how satisfied are you with the SAAT training?" Responses are given on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*).
3. Attendance. Platoon leaders verified the attendance of each Platoon member at each training session, and provided reasons for late arrivals and absentees.
4. Instructed response items. To identify careless responding, two to three instructed response items were presented at different places in the survey. The general format of these items is: "To help us monitor the quality of the data you're giving us, please select the option [the "correct" option is requested]…". Meade and Craig (2012) have shown that instructed response items are a valid and economic tool to detect careless responding.

Perceived social fitness (15 items)

Please indicate how much confidence you have that you could perform each of these activities successfully.

1. Become part of a group.
2. Build good connections with others.
3. Find people to turn to.
4. Use my social skills and abilities for the benefit of the platoon.
5. Take pride in my platoon.
6. Know how my actions affect how others feel.
7. Understand others without the need for them to say anything.
8. Understand what others really mean through their expressions, body language, etc.
9. Find a good way to solve an interpersonal conflict.
10. Share with a group of people an interesting experience I once had.
11. Ask a group of people who are planning to engage in a social activity (e.g. go to a movie) if I can join them.
12. Be involved in group activities.
13. Express my feelings to another person.
14. Ask someone for help when I need it.
15. Join a lunch or dinner table where people are already sitting and talking.

Response options:

(1) No confidence at all
(2) Little confidence
(3) Moderate confidence
(4) Much confidence
(5) Complete confidence

Please indicate how much you agree or disagree with the following statements:

1. I believe that social skills can be improved through practice.
2. I believe that it is important for a platoon to have a common identity.
3. I believe that it is right for a platoon to socially reject its poorly performing members.

Response options are 1 (strongly disagree) to 5 (strongly agree).

Below you see a list of social behaviors. Please indicate how often you have shown these behaviors in the last work week.

Response format: 0 (never), 1 (once), 2 (2-3 times), 3 (4 times or more)

1. Considered different options before acting upon my emotions. (Session 5)
2. Took another person's perspective. (Session 1)
3. Shared good times with other people in my platoon. (Session 4)
4. Listened attentively to other people in my platoon. (Session 6)
5. Paid attention to people's faces, eyes, body language, and tone of voice. (Session 2)
6. Addressed a conflict that I was tempted to ignore. (Session 7)
7. Tried to keep or earn the trust of other people in my platoon. (Session 3)

1. How often do you feel that you lack companionship?

2. How often do you feel that you are 'in tune' with the people around you?

3. How often do you feel that there are people you can talk to?

4. How often do you feel left out?

5. How often do you feel that there are people you can turn to?

6. How often do you feel that you have a lot in common with the people around you?

7. How often do you feel close to people?

8. How often do you feel isolated from others?

9. How often do you feel part of a group of friends?

Response options are 1 (never), 2 (rarely), 3(sometimes) and 4 (always).

These items belong to the following subscales:

- For Intimate Connectedness: 1, 4, 8

- For Relational Connectedness: 3, 5, 7

- For Collective Connectedness: 2, 6, 9

This questionnaire is concerned with how many people you see or talk to on a regular basis including family, friends, workmates, neighbors, etc. Please read and answer each question carefully.

1. How many children do you have?
____0   ____1   ____2   ____3   ____4   ____5   ____6   ____7 or more

   (If 1 or more children: Insert question on satisfaction with relationship with children here)

2. Are either of your parents living?
____ (0) neither   ____ (1) mother only   ____ (2) father only   ____ (3) both

   (If any parents are living: Insert question on satisfaction with relationship with parents here)

3. How many other relatives (other than your spouse, parents & children) do you feel close to?
____0   ____1   ____2   ____3   ____4   ____5   ____6   ____7 or more

   (If 1 or more close relatives: Insert question on satisfaction with relationship with relatives here)

4. How many close friends do you have? (meaning people that you feel at ease with, can talk to about private matters, and can call on for help)
____0   ____1   ____2   ____3   ____4   ____5   ____6   ____7 or more

   (If 1 or more close friends: Insert question on satisfaction with relationship with friends here)

5. Do you belong to a church, temple, or other religious group? (If not, check 'no' and skip to question 8.)
            _____ no   _____ yes

6. How many members of your church or religious group do you talk to at least once every 2 weeks? (This includes at group meetings and services.)
____0   ____1   ____2   ____3   ____4   ____5   ____6   ____7 or more

The following questions ask about your relationships with family and friends. Please answer each question as directed.

1 The following question is about your relationship with your **child/children.**

   (If you have no children, please skip to Q2)

   On average, how satisfied are you in your relationships with your chlidren?

Not at all				Very much
1	2	3	4	5

2 The following questions are about your relationship with your **parent/parents.**

   On average, how satisfied are you in your relationship with your parent(s)?

Not at all				Very much
1	2	3	4	5

3 The following questions are about your relationships with your **friends.**

   On average, how satisfied are you in your relationships with your friend(s)?

Not at all				Very much
1	2	3	4	5

4 Please tell us about your relationship with your **relatives** (not including spouse, parents, children)**.**

   On average, how satisfied are you in your relationships with your relative(s)?

Not at all				Very much
1	2	3	4	5

The following questions ask about your relationships with the people in your platoon.

On average, how well do you know the people in your platoon?
Not at all   Very well
1   2   3   4   5

On average, how satisfied are you with your relationships with people in your platoon?
Not at all   Very much
1   2   3   4   5

Are you currently in a serious relationship with someone?

❑ yes

❑ no

1. Which of the following best describes your marital status?

____ (1) currently married & living together, or living with someone in marital-like relationship

____ (2) never married & never lived with someone in a marital-like relationship

____ (3) separated

____ (4) divorced or formerly lived with someone in a marital-like relationship

____ (5) widowed

The statements below are about your relationship with your spouse or partner.

Please read each statement and describe how much you agree or disagree by circling the number that best fits your answer.

	extremely unhappy	fairly unhappy	a little unhappy	happy	very happy	extremely happy	perfect
2 Please indicate the degree of happiness, all things considered, of your relationship.	0	1	2	3	4	5	6

	not at all true	a little true	somewhat true	mostly true	completely true	completely true	
3 I have a warm and comfortable relationship with my partner.	0	1	2	3	4	5	

	not at all	a little	somewhat	mostly	almost	completely	
4 How rewarding is your relationship with your partner?	0	1	2	3	4	5	
5 In general, how satisfied are you with your relationship?	0	1	2	3	4	5	

Communication With Friends And Family

1. On average, how often do you communicate with your friends and family by phone?

Never	Once a week	2-4 times a week	5-6 times a week	Every day
0	1	2	3	4

2. On average, how often do you communicate with your friends and family by internet (e.g. email, Skype)?

Never	Once a week	2-4 times a week	5-6 times a week	Every day
0	1	2	3	4

3. How satisfied are you with the communication by phone?

Not at all				Very much
1	2	3	4	5

4. How satisfied are you with the communication by internet?

Not at all				Very much
1	2	3	4	5

Please indicate to what extent you agree with the following statements.

1	2	3	4	5

Do not agree at all   Agree completely

1. I often have tender, concerned feelings for people less fortunate than I am.

    1 2 3 4 5

2. Sometimes I don't feel very sorry for other people when they are having problems.

    1 2 3 4 5

3. Other people's misfortunes do not usually disturb me a great deal.

    1 2 3 4 5

4. When I see someone being taken advantage of, I feel kind of protective toward them.

    1 2 3 4 5

Perspective Taking Scale

The following statements inquire about your thoughts and feelings in a variety of situations. In the space before each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page. READ EACH ITEM CAREFULLY BEFORE RESPONDING. Answer as honestly as you can.

1	2	3	4	5
Does NOT Describe me Well				Describes Me Well

___ 1. Before criticizing somebody, I should try to imagine how **I** would feel if I were in his/her place.

___ 2. If I'm sure I'm right about something, I shouldn't waste much time listening to other people's arguments.

___ 3. I should sometimes try to understand my friends better by imagining how things look from their perspective.

___ 4. I believe that there are two sides to every question and believe I should try to look at them both.

___ 5. In find it difficult to see things from the "other guy's" point of view.

___ 6. I should try to look at everybody's side of a disagreement before I make a decision.

___ 7. When I'm upset at someone, I should try to "put myself in his shoes" for a while.

For the following items, please indicate the degree to which each statement is true for you.

1. I often feel nervous even in casual get-togethers.

2. I wish I had more confidence in social situations.

3. I seldom feel anxious in social situations.

Response options:

Not at all like me (0)

Slightly like me (1)

Moderately like me (2)

Very like me (3)

Extremely like me (4)

For each item, please indicate whether you think the statement is applicable to you by selecting the option that corresponds to either **True** or **False**.

1. When someone does me wrong, I feel I should pay him back if I can, just for the principle of the thing.

2. I can be friendly with people who do things which I consider wrong.

3. I don't blame anyone for trying to grab everything he can get in this world.

4. I do not blame a person for taking advantage of someone who lays himself open to it.

5. I would certainly enjoy beating a crook at his own game.

6. I have at times had to be rough with people who were rude or annoying.

7. I am often inclined to go out of my way to win a point with someone who has opposed me.

8. I do not try to cover up my poor opinion or pity of a person so that he won't know how I feel.

9. I strongly defend my own opinions as a rule.

Please think about people from Afghanistan. How well do each of the following items describe Afghani people?

	1	2	3	4	5
	does not describe Afghani people at all				describes Afghani people very well

1. intelligent

2. ambitious

3. competent

4. sincere

5. friendly

6. warm

Please think about people from the United States. How well do each of the following items describe American people?

1	2	3	4	5
does not describe American people at all				describes American people very well

1. intelligent

2. ambitious

3. competent

4. sincere

5. friendly

6. warm

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SOCIAL RELATIONSHIPS AND HEALTH

The questions in this scale ask you about your feelings and thoughts during the past two weeks. In each case, please indicate how often you felt or thought a certain way by filling in the appropriate circle.

	Never	Almost Never	Sometimes	Fairly Often	Very Often
1. In the last week, how often have you felt that you were unable to control the important things in your life?	○	○	○	○	○
2. In the last week, how often have you felt confident about your ability to handle your personal problems?	○	○	○	○	○
3. In the last week, how often have you felt that things were going your way?	○	○	○	○	○
4. In the last week, how often have you felt difficulties were piling up so high that you could not overcome them?	○	○	○	○	○

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Year

Participant ID#

-

Draft

On average, how would you describe your mood in the last work week?

0   1   2   3   4   5   6   7   8   9   10

extremely unpleasant   extremely pleasant

During the past work week, how would you rate your sleep quality overall?

very good   fairly good   fairly bad   very bad

Please answer the following questions in terms of how you usually think.

1	2	3	4	5
STRONGLY DISAGREE				STRONGLY AGREE

1. When bad things happen to me, I expect more bad things to happen.

2. When bad things happen to me, I blame myself for them.

3. When bad things happen to me, I cannot stop thinking about how much worse things will get.

4. When I fail at something, I give up all hope.

For each of the following statements, please circle the answer that best describes your belief.

1. Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?

   Most people can be trusted   can't be too careful

2. Would you say that most of the time, people try to be helpful, or that they are mostly just looking out for themselves?

   Try to be helpful   look out for themselves

3. Do you think that most people would try to take advantage of you if they got the chance or would they try to be fair?

   Take advantage   try to be fair

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CENTER FOR COGNITIVE AND SOCIAL NEUROSCIENCE

INSTRUCTIONS:

Here are a number of personality traits that may or may not apply to you. Please fill in the circle indicating the extent to which *you agree or disagree with that statement.* You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

	Disagree strongly	Disagree moderately	Disagree a little	Neither agree or disagree	Agree a little	Agree moderately	Agree strongly
1. Extraverted, enthusiastic.	○	○	○	○	○	○	○
2. Critical, quarrelsome.	○	○	○	○	○	○	○
3. Dependable, self-disciplined.	○	○	○	○	○	○	○
4. Anxious, easily upset.	○	○	○	○	○	○	○
5. Open to new experiences, complex.	○	○	○	○	○	○	○
6. Reserved, quiet.	○	○	○	○	○	○	○
7. Sympathetic, warm.	○	○	○	○	○	○	○
8. Disorganized, careless.	○	○	○	○	○	○	○
9. Calm, emotionally stable.	○	○	○	○	○	○	○
10. Conventional, uncreative.	○	○	○	○	○	○	○

D R R I

A Survey of Experiences Before, During, and After Military Deployment

This survey contains questions regarding your experiences before, during, and after military deployment. No one has had exactly the same experiences that you have had, so your input is very important. There are no right or wrong answers.

Be sure to answer every statement, and press firmly on the page when circling your responses. If you want to change your response, please place an "X" over your original answer, and then circle the more appropriate response.

DRRI

SECTION A: PRE-DEPLOYMENT LIFE EVENTS

The statements below refer to events you may have experienced BEFORE YOU WERE DEPLOYED. Please circle "yes" or "no" for each item below.

Before I was deployed, I experienced…

1.	...a natural disaster (for example, a flood or hurricane), a fire, or an accident in which I was hurt or my property was damaged.	**Yes**	**No**
2.	...exposure to a toxic substance (such as dangerous chemicals, radiation).	**Yes**	**No**
3.	...combat or exposure to a war zone (in the military or as a civilian).	**Yes**	**No**
4.	...the mental illness (for example, clinical depression, anxiety disorder), or life-threatening physical illness (for example, cancer or heart disease) of someone close to me.	**Yes**	**No**
5.	...a parent who had a problem with drugs or alcohol.	**Yes**	**No**
6.	...the death of someone close to me.	**Yes**	**No**

Before I was deployed, I had...

7.	...been through a divorce or been left by a partner or significant other.	**Yes**	**No**
8.	...witnessed someone being assaulted or violently killed.	**Yes**	**No**
9.	...been robbed or had my home broken into.	**Yes**	**No**
10.	...lost my job.	**Yes**	**No**
11.	...been emotionally mistreated (for example, shamed, embarrassed, ignored, or repeatedly told I was no good).	**Yes**	**No**
12.	...seen or heard physical fighting between my parents or caregivers.	**Yes**	**No**
13.	...been physically punished by a parent or primary caregiver.	**Yes**	**No**
14.	...been physically injured by another person (for example, hit, kicked, beaten up).	**Yes**	**No**
14a.	[IF YES] did this occur (circle all that apply):	**in childhood**	**in adulthood**
15.	...experienced unwanted sexual activity as a result of force, threat of harm, or manipulation.	**Yes**	**No**
15a.	[IF YES] did this occur (circle all that apply):	**in childhood**	**in adulthood**

The sentences below refer to your family when you were growing up. Please read each statement and decide how often it was true for your family by circling the number below the appropriate response. If you spent time in more than one family setting, please answer these questions about the family in which you spent the greatest part of your childhood.

	Almost none of the time	A few times	Some of the time	Most of the time	Almost all of the time
1. People in my family did things together.	1	2	3	4	5
2. Family members got on each other's nerves (annoyed each other).	1	2	3	4	5
3. Family members felt uncomfortable with each other.	1	2	3	4	5
4. Family members were there for each other during difficult times.	1	2	3	4	5
5. Family members felt very close to each other.	1	2	3	4	5
6. Family members avoided each other.	1	2	3	4	5
7. When problems arose, family members compromised.	1	2	3	4	5
8. Family members were afraid to say what was on their minds.	1	2	3	4	5
9. There was fighting among family members.	1	2	3	4	5
10. Family members yelled when they were angry with each other.	1	2	3	4	5
11. Family members discussed their personal problems with each other.	1	2	3	4	5
12. Family members shared household responsibilities.	1	2	3	4	5
13. Family members were affectionate with each other.	1	2	3	4	5
14. Family members insulted or swore at each other.	1	2	3	4	5
15. Family members were critical of each other.	1	2	3	4	5

SECTION C: TRAINING AND DEPLOYMENT PREPARATION

Below are several statements about how well prepared you were by the military for your deployment. Please describe how much you agree or disagree with each statement by circling the number that best fits your answer.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. I had all the supplies and equipment needed to get my job done.	1	2	3	4	5
2. The equipment I was given functioned the way it was supposed to.	1	2	3	4	5
3. I received adequate training on how to use my equipment.	1	2	3	4	5
4. I knew how to treat animal bites, insect stings, or allergic reactions to plants in the region.	1	2	3	4	5
5. I received adequate training on what to do in case of a nuclear, biological, or chemical (NBC) attack.	1	2	3	4	5
6. I had enough gear to protect myself in case of a nuclear, biological, or chemical (NBC) attack.	1	2	3	4	5
7. I received adequate training on how to perform daily life activities while wearing nuclear, biological, or chemical (NBC) protective gear.	1	2	3	4	5
8. I was adequately prepared to deal with the region's climate.	1	2	3	4	5
9. I was accurately informed about what to expect from the enemy.	1	2	3	4	5
10. I saw as much combat as I expected.	1	2	3	4	5
11. I was informed about the role my unit was expected to play in the deployment.	1	2	3	4	5
12. When I was deployed I had a pretty good idea of how long the mission would take to complete.	1	2	3	4	5
13. I was accurately informed of what daily life would be like during my deployment.	1	2	3	4	5
14. I was adequately trained to work the shifts required of me during my deployment.	1	2	3	4	5

SECTION D: DEPLOYMENT ENVIRONMENT

The next set of statements is about the conditions of day-to-day life during your deployment. Please read each statement and decide what amount of time you were exposed to each condition over the course of the entire time you were deployed. Circle the number below the appropriate response.

	Almost none of the time	A few times	Some of the time	Most of the time	Almost all of the time
1. The climate was extremely uncomfortable.	1	2	3	4	5
2. I had to deal with annoying animals, insects, or plants during my deployment.	1	2	3	4	5
3. I had access to clean clothing when I needed it.	1	2	3	4	5
4. I could get a cold drink (for example, water, juice, etc.) when I wanted one.	1	2	3	4	5
5. The food I had to eat was of very poor quality (for example, bad or old MREs).	1	2	3	4	5
6. The conditions I lived in were extremely unsanitary.	1	2	3	4	5
7. I had access to bathrooms or showers when I needed them.	1	2	3	4	5
8. I got as much sleep as I needed.	1	2	3	4	5
9. The living space was too crowded.	1	2	3	4	5
10. I was able to get enough privacy.	1	2	3	4	5
11. The workdays were too long.	1	2	3	4	5
12. I got the R&R (rest and relaxation) that I needed.	1	2	3	4	5
13. I got my mail in a timely manner.	1	2	3	4	5
14. I was exposed to awful smells.	1	2	3	4	5
15. I was subjected to loud noises.	1	2	3	4	5
16. I had to hassle with putting on and taking off NBC equipment.	1	2	3	4	5
17. I had the equipment or supplies to do what I needed to do.	1	2	3	4	5
18. My daily activities were restricted because of local religious or ethnic customs.	1	2	3	4	5
19. I felt comfortable living in the culture or cultures where I was deployed.	1	2	3	4	5
20. Pressure to conform to the local culture made it difficult for me to do my job.	1	2	3	4	5

SECTION E: LIFE & FAMILY CONCERNS

The following set of statements refers to concerns you may have had related to your life and family back home while you were deployed. These questions do not ask if these events actually occurred, but only how concerned you were that they might happen while you were deployed. Please describe how concerned you were for each item by circling the number that best fits your answer.

While I was deployed, I was concerned about…	Not applicable	Not at all	A little	Moderately	A great deal
1. …missing out on a promotion at my job back home.	0	1	2	3	4
2. …missing out on opportunities to start a career while I was away.	0	1	2	3	4
3. …damaging my career because I was overseas for a long time.	0	1	2	3	4
4. …losing touch with my co-workers or supervisors back home.	0	1	2	3	4
5. …being unable to financially support my family while I was away.	0	1	2	3	4
6. …harming my relationship with my spouse/significant other.	0	1	2	3	4
7. …being left by my spouse/significant other.	0	1	2	3	4
8. …missing out on my children's growth and development while I was away.	0	1	2	3	4
9. …losing touch with my friends.	0	1	2	3	4
10. …missing important events at home such as birthdays, weddings, funerals, graduations, etc.	0	1	2	3	4
11. …the well-being of my family or friends while I was away.	0	1	2	3	4
12. …my inability to help my family or friends if they had some type of problem.	0	1	2	3	4
13. …my inability to directly manage or control family affairs.	0	1	2	3	4
14. …the care that my children were receiving while I was away.	0	1	2	3	4

SECTION F: UNIT SUPPORT

The statements below are about your relationships with other military personnel while you were deployed. Please read each statement and describe how much you agree or disagree by circling the number that best fits your answer.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. My unit was like family to me.	1	2	3	4	5
2. I felt a sense of camaraderie between myself and other soldiers in my unit.	1	2	3	4	5
3. Members of my unit understood me.	1	2	3	4	5
4. Most people in my unit were trustworthy.	1	2	3	4	5
5. I could go to most people in my unit for help when I had a personal problem.	1	2	3	4	5
6. My commanding officer(s) were interested in what I thought and how I felt about things.	1	2	3	4	5
7. I was impressed by the quality of leadership in my unit.	1	2	3	4	5
8. My superiors made a real attempt to treat me as a person.	1	2	3	4	5
9. The commanding officer(s) in my unit were supportive of my efforts.	1	2	3	4	5
10. I felt like my efforts really counted to the military.	1	2	3	4	5
11. The military appreciated my service.	1	2	3	4	5
12. I was supported by the military.	1	2	3	4	5

SECTION G: RELATIONSHIPS WITHIN UNIT

The next set of questions is also about your relationships with other military personnel while deployed. Please describe how often you experienced each circumstance by circling the number that best fits your answer.

While I was deployed, unit leaders or other unit members:	Never	Once or twice	Sometimes	Many times
1. …treated me in an overly critical way.	1	2	3	4
2. …behaved in a way that was uncooperative when working with me.	1	2	3	4
3. ... treated me as if I had to work harder than others to prove myself.	1	2	3	4
4. ... questioned my abilities or commitment to perform my job effectively.	1	2	3	4
5. ... acted as though my mistakes were worse than others.	1	2	3	4

While I was deployed, unit leaders or other unit members:	Never	Once or twice	Sometimes	Many times
6. …tried to make my job more difficult to do.	1	2	3	4
7. ..."put me down" or treated me in a condescending way.	1	2	3	4
8. ... gossiped about my sex life or spread rumors about my sexual activities.	1	2	3	4
9. ...made crude and offensive sexual remarks directed at me, either publicly or privately.	1	2	3	4
10. …offered me some sort of reward or special treatment to take part in sexual behavior.	1	2	3	4
11. …threatened me with some sort of retaliation for not being sexually cooperative (for example, the threat of a negative review, physical violence, or to ruin my reputation).	1	2	3	4
12. …made unwanted attempts to stroke or fondle me (for example, stroking my leg or neck).	1	2	3	4
13. ...made unwanted attempts to have sex with me.	1	2	3	4
14. ...forced me to have sex.	1	2	3	4

SECTION H: DEPLOYMENT CONCERNS

The statements below are about the amount of danger you felt you were exposed to while you were deployed. Please read each statement and describe how much you agree or disagree with each statement by circling the number in the column that best fits your answer.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. I thought I would never survive.	1	2	3	4	5
2. I felt safe.	1	2	3	4	5
3. I was extremely concerned that the enemy would use nuclear, biological, chemical agents (NBCs) against me.	1	2	3	4	5
4. I felt that I was in great danger of being killed or wounded.	1	2	3	4	5
5. I was concerned that my unit would be attacked by the enemy.	1	2	3	4	5
6. I worried about the possibility of accidents (for example, friendly fire or training injuries in my unit).	1	2	3	4	5
7. I was afraid I would encounter a mine or booby trap.	1	2	3	4	5

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
8. I felt secure that I would be coming home after the war.	1	2	3	4	5
9. I thought that vaccinations I received would actually cause me to be sick.	1	2	3	4	5
10. I was concerned that the tablets I took to protect me would make me sick.	1	2	3	4	5
11. I felt that I would become sick from the pesticides or other routinely used chemicals.	1	2	3	4	5
12. I was concerned about the health effects of breathing bad air.	1	2	3	4	5
13. I thought that exposure to depleted uranium would negatively affect my health.	1	2	3	4	5
14. I was afraid that the equipment I was given to protect me from nuclear, biological, chemical agents (NBCs) would not work.	1	2	3	4	5
15. I worried about getting an infectious disease.	1	2	3	4	5

SECTION I: COMBAT EXPERIENCES

The statements below are about your combat experiences during deployment. Please circle "yes" if the statement is true or "no" if the statement is false.

While deployed:

1. I went on combat patrols or missions.	Yes	No
2. I or members of my unit encountered land or water mines and/or booby traps.	Yes	No
3. I or members of my unit received hostile incoming fire from small arms, artillery, rockets, mortars, or bombs.	Yes	No
4. I or members of my unit received "friendly" incoming fire from small arms, artillery, rockets, mortars, or bombs.	Yes	No
5. I was in a vehicle (for example, a truck, tank, APC, helicopter, plane, or boat) that was under fire.	Yes	No
6. I or members of my unit were attacked by terrorists or civilians.	Yes	No
7. I was part of a land or naval artillery unit that fired on the enemy.	Yes	No
8. I was part of an assault on entrenched or fortified positions.	Yes	No
9. I took part in an invasion that involved naval and/or land forces.	Yes	No
10. My unit engaged in battle in which it suffered casualties.	Yes	No
11. I personally witnessed someone from my unit or an ally unit being seriously wounded or killed.	Yes	No

12.	I personally witnessed soldiers from enemy troops being seriously wounded or killed.	Yes	No
13.	I was wounded or injured in combat.	Yes	No
14.	I fired my weapon at the enemy.	Yes	No
15.	I killed or think I killed someone in combat.	Yes	No

SECTION J: POST-BATTLE EXPERIENCES

Next are statements about your experiences AFTER battle. Please indicate if you ever experienced the following events anytime while you were deployed by circling either "yes" or "no."

1.	I observed homes or villages that had been destroyed.	Yes	No
2.	I saw refugees who had lost their homes and belongings as a result of battle.	Yes	No
3.	I saw people begging for food.	Yes	No
4.	I or my unit took prisoners of war.	Yes	No
5.	I interacted with enemy soldiers who were taken as prisoners of war.	Yes	No
6.	I was exposed to the sight, sound, or smell of animals that had been wounded or killed from war-related causes.	Yes	No
7.	I took care of injured or dying people.	Yes	No
8.	I was involved in removing dead bodies after battle.	Yes	No
9.	I was exposed to the sight, sound, or smell of dying men and women.	Yes	No
10.	I saw enemy soldiers after they had been severely wounded or disfigured in combat.	Yes	No
11.	I saw the bodies of dead enemy soldiers.	Yes	No
12.	I saw civilians after they had been severely wounded or disfigured.	Yes	No
13.	I saw the bodies of dead civilians.	Yes	No
14.	I saw Americans or allies after they had been severely wounded or disfigured in combat.	Yes	No
15.	I saw the bodies of dead Americans or allies.	Yes	No

SECTION K: EXPOSURE TO NUCLEAR, BIOLOGICAL, CHEMICAL AGENTS

Next are some statements about nuclear, biological, and chemical agents (NBCs) that you may have been exposed to during the time you were preparing for deployment or during your deployment. For each statement, circle "yes," "no," or "I don't know."

Either in preparation for or during my deployment…

1.	...I took pyridostigmine or little white pills in foil packets, sometimes called NAPPs, which are used to protect against nerve gas.	**Yes**	**No**	**Don't know**
2.	...I received preventative vaccinations by injection (for example, to prevent anthrax or botulism). [Note: for women, preventative vaccinations may include deprovera (birth control).]	**Yes**	**No**	**Don't know**

While I was deployed, I was exposed to…

3.	...nerve gas agents (for example, sarin).	**Yes**	**No**	**Don't know**
4.	...mustard gas or other blistering agents.	**Yes**	**No**	**Don't know**
5.	...environmental pesticides (for example, from "fogger" trucks).	**Yes**	**No**	**Don't know**
6.	...pesticides in uniforms.	**Yes**	**No**	**Don't know**
7.	...pesticides in flea collars.	**Yes**	**No**	**Don't know**
8.	…government-issued DEET-containing insect repellents.	**Yes**	**No**	**Don't know**
9.	…non-government issued insect repellents (for example, Avon Skin-So-Soft, Off).	**Yes**	**No**	**Don't know**
10.	...smoke or other air pollution.	**Yes**	**No**	**Don't know**
11.	...diesel or other petrochemical fuel on my skin.	**Yes**	**No**	**Don't know**
12.	...fumes or exhaust from heaters or generators, including heaters in tents.	**Yes**	**No**	**Don't know**
13.	...depleted uranium in munitions.	**Yes**	**No**	**Don't know**
14.	...burning trash or burning feces.	**Yes**	**No**	**Don't know**
15.	...local food other than that provided by the Armed Forces.	**Yes**	**No**	**Don't know**

While I was deployed…

16.	…I was within 1 km of an exploding artillery shell.	**Yes**	**No**	**Don't know**
17.	…I was within 5 km of an exploding missile.	**Yes**	**No**	**Don't know**
18.	…I entered an enemy bunker or military facility.	**Yes**	**No**	**Don't know**
19.	…I climbed inside an enemy tank that had been abandoned or burned out.	**Yes**	**No**	**Don't know**
20.	…I was exposed to chemical or biological weapons.	**Yes**	**No**	**Don't know**

SECTION L: POST-DEPLOYMENT SUPPORT

You have completed the questions about your deployment. The next set of statements refers to social support after deployment. Please decide how much you agree or disagree with each statement and circle the number that best fits your choice.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. The reception I received when I returned from my deployment made me feel appreciated for my efforts.	1	2	3	4	5
2. The American people made me feel at home when I returned.	1	2	3	4	5
3. When I returned, people made me feel proud to have served my country in the Armed Forces.	1	2	3	4	5
4. I am carefully listened to and understood by family members or friends.	1	2	3	4	5
5. Among my friends or relatives, there is someone who makes me feel better when I am feeling down.	1	2	3	4	5
6. I have problems that I can't discuss with family or friends.	1	2	3	4	5
7. Among my friends or relatives, there is someone I go to when I need good advice.	1	2	3	4	5
8. People at home just don't understand what I have been through while in the Armed Forces.	1	2	3	4	5
9. There are people to whom I can talk about my deployment experiences.	1	2	3	4	5
10. The people I work with respect the fact that I am a veteran.	1	2	3	4	5
11. My supervisor understands when I need time off to take care of personal matters.	1	2	3	4	5
12. My friends or relatives would lend me money if I needed it.	1	2	3	4	5
13. My friends or relatives would help me move my belongings if I needed to.	1	2	3	4	5
14. When I am unable to attend to daily chores, there is someone who will help me with these tasks.	1	2	3	4	5
15. When I am ill, friends or family members will help out until I am well.	1	2	3	4	5

SECTION M: POST-DEPLOYMENT LIFE EVENTS

The next statements refer to events you may have experienced SINCE RETURNING FROM YOUR DEPLOYMENT. These questions are similar to the items you've answered previously about events before your deployment. For this page, please circle "yes" or "no" for each of the items below.

Since returning home, I have experienced…

1.	...a natural disaster (for example, a flood or hurricane), a fire, or an accident in which I was hurt or my property was damaged.	Yes	No
2.	...exposure to a toxic substance (such as dangerous chemicals or radiation).	Yes	No
3.	...combat or exposure to a war-zone (in the military or as a civilian).	Yes	No
4.	...a serious operation.	Yes	No
5.	...a mental illness (for example, clinical depression or anxiety disorder), or life-threatening physical illness (for example, cancer or heart disease) of someone close to me.	Yes	No
6.	...the death of someone close to me.	Yes	No

Since returning home, I have...

7.	...experienced stressful legal problems (for example, being sued or suing someone else).	Yes	No
8.	...witnessed someone being assaulted or violently killed.	Yes	No
9.	...been robbed or had my home broken into.	Yes	No
10.	...had a family member with a serious drug or alcohol problem.	Yes	No
11.	...been unemployed and seeking employment for at least 3 months.	Yes	No
12.	...been emotionally mistreated (for example, shamed, embarrassed, ignored, or repeatedly told I was no good).	Yes	No
13.	...experienced unwanted sexual activity as a result of force, threat of harm, or manipulation.	Yes	No
14.	...been physically injured by another person (for example, hit, kicked, or beaten up).	Yes	No
15.	...lost my job.	Yes	No
16.	...gone through a divorce or been left by a partner or significant other.	Yes	No
17.	…had problems getting access to adequate healthcare.	Yes	No

These questions ask about some of your experiences growing up as a child and a teenager. For each question, circle how often you experienced the kinds of examples listed. Although some of these questions are of a personal nature, please try to answer as honestly as you can. Remember, all your answers are kept confidential.

Overall, how often did you experience the following?

WHEN I WAS GROWING UP…

1. I knew there was no one to take care of me and protect me.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

2. My parents were too drunk or high to take care of the family.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

3. My family was not a source of strength and support for me.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

4. People in my family did not look out for each other.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

5. I thought that my parent wished I had never been born.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

6. I felt that someone in my family hated me.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

7. I got hit so hard by someone in my family that I had to go see a doctor or go to the hospital.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

8. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor, or doctor.

Never true	Rarely true	Sometimes true	Often true	Very often true
1	2	3	4	5

These questions ask about your combat experiences in your most recent deployment. For each question, indicate whether you experienced the kinds of examples listed in your most recent deployment:

Which of the following fight-related experiences did you undergo?
1. Being attacked or ambushed
2. Receiving small arms fire
3. Disarming civilians
4. Shooting or directing fire at the enemy
5. Calling in fire on the enemy
6. Engaging in hand-to-hand combat
7. Clearing/searching homes or buildings
8. Clearing/searching caves or bunkers

Which of the following combat-related experiences did you undergo?
9. Being directly responsible for death of an enemy combatant
10. Being directly responsible for death of an non-combatant
11. Being directly responsible for death of U.S. or ally personnel

Which of the following threatening experiences did you undergo?
12. IED/booby trap exploded near you
13. Working in areas that were mined
14. Participated in demining operations
15. Being in threatening situations where you were unable to respond because of rules of engagement
16. Being wounded/injured
17. Had a close call, dud landed near you
18. Had a close call, was shot or hit but protective gear saved you
19. Had a buddy shot or hit who was near you

Which of the following death and injury-related experiences did you undergo?
20. Seeing dead bodies or human remains
21. Handling or uncovering human remains
22. Witnessing an accident which resulted in serious injury or death
23. Seeing dead or seriously injured Americans
24. Knowing someone seriously injured or killed
25. Having a member of your own unit become a casualty

Which of the following violence-related experiences did you undergo?
26. Witnessing violence within the local population or between ethnic groups
27. Witnessing brutality/mistreatment toward non-combatants

Which of the following aid-related experiences did you undergo?
28. Provided aid to the wounded
29. Saved the life of a Soldier or civilian

The next set of questions is about your relationships with other military personnel.
Please describe how often you experienced each circumstance in your platoon by selecting the number that best fits your answer.

In the past month, leaders or other members of my platoon:

	Never	Once or twice	Sometimes	Many times
	1	2	3	4

1. …treated me in an overly critical way.

2. …behaved in a way that was uncooperative when working with me.

3. ... treated me as if I had to work harder than others to prove myself.

4. ... questioned my abilities or commitment to perform my job effectively.

5. ... acted as though my mistakes were worse than others.

6. …tried to make my job more difficult to do.

7. ..."put me down" or treated me in a condescending way.

1. How many times have you been deployed?

   0
   1
   2
   3
   4
   5
   6
   7
   8 or more

2. How many times have you been deployed to a combat zone?

   0
   1
   2
   3
   4
   5
   6
   7
   8 or more

Have you ever been deployed to a combat zone?

     (0) no
     (1) yes

Please tell us how much you DISAGREE or AGREE with the statements below about your platoon.

1. The members of my platoon cooperate with each other.

    Strongly Disagree   Strongly Agree
          1   2   3   4   5

2. The members of my platoon know that they can depend on each other.

    Strongly Disagree   Strongly Agree
          1   2   3   4   5

3. The members of my platoon stand up for each other.

    Strongly Disagree   Strongly Agree
          1   2   3   4   5

4. My closest friendships are with people in my platoon.

    Strongly Disagree   Strongly Agree
          1   2   3   4   5

5. I can go to most people in my platoon for help when I have a personal problem.

    Strongly Disagree   Strongly Agree
          2   2   3   4   5

6. My superiors make a real attempt to treat me as a person.

    Strongly Disagree   Strongly Agree
          1   2   3   4   5

7. My commanding officers are interested in what I think and how I feel about things.

    Strongly Disagree   Strongly Agree
          1   2   3   4   5

Please tell us how often your platoon shows the following behaviors.

1	2	3	4	5
Never	almost never	sometimes	fairly often	very often

1. How often do people in your platoon get into arguments with each other?

   1   2   3   4   5

2. How often do people in your platoon yell at each other?

   1   2   3   4   5

3. How often are people in your platoon rude to each other?

   1   2   3   4   5

4. How often do people in your platoon do bad things to each other?

   1   2   3   4   5

Please indicate how strongly you agree or disagree with each of the following statements about your platoon leaders and members.

1. My immediate supervisor has much knowledge about the work that needs to be done.

   Strongly Disagree   Strongly Agree
       1   2   3   4   5

2. I trust my fellow Soldiers in my platoon to look out for my welfare and safety.

   Strongly Disagree   Strongly Agree
       1   2   3   4   5

3. I think we are better trained than most other platoons in the company.

   Strongly Disagree   Strongly Agree
       1   2   3   4   5

4. Overall, I trust my immediate supervisor.

   Strongly Disagree   Strongly Agree
       1   2   3   4   5

5. My leaders respect and value me.

   Strongly Disagree   Strongly Agree
       1   2   3   4   5

Directions: The following sentences refer to your **first line supervisor's** leadership style, as you perceive it. Judge how frequently each statement fits his **leadership style** using the following scale:

0	1	2	3	4
Not at all	Once in awhile	Sometimes	Fairly often	Frequently or always

My leader…

1.   Provides me with assistance in exchange for my efforts………………………………..   _____
2.   Talks enthusiastically about what needs to be accomplished………………………….   _____
3.   Spends time teaching and coaching…………………………………………………………   _____
4.   Treats me as an individual rather than just as a member of a group…………………..   _____
5.   Concentrates his full attention on dealing with mistakes, complaints, and failures…… _____
6.   Keeps track of all mistakes……………………………………………………………   _____
7.   Gets me to look at problems from many different angles……………………………   _____
8.   Suggests new ways of looking at how to complete assignments……………………   _____
9.   Emphasizes the importance of having a collective sense of mission………………..   _____
10.   Expresses satisfaction when I meet expectations……………………………………   _____

Thinking about your first line supervisor, rate how often the following occur. Circle the appropriate response after each statement.

How often does your first line supervisor:

1. embarrass squad members in front of other squad members.

   Never   Seldom   Sometimes   Often   Always

2. try to look good to higher-ups by assigning extra missions or details to squad members.

   Never   Seldom   Sometimes   Often   Always

3. show favoritism to certain members in the squad.

   Never   Seldom   Sometimes   Often   Always

The statements below describe situations that commonly arise in platoons. For each situation please rate how certain you are that your platoon, working together as a whole, can manage them effectively.

How confident are you that members of your platoon can:

1. Resolve conflicts among platoon members.

2. Prevent disagreements from turning into heated arguments

3. Support each other in times of stress

4. Bounce back quickly from adverse experiences

5. Build trust in each other

6. Develop a strong identity

1	2	3	4	5

Not at all confident   Highly confident

The following statements represent possible feelings that you might have about the Army. Please indicate the degree to which you disagree or agree with each statement.

       1   2   3   4   5

Strongly Disagree   Strongly Agree

1. The Army is willing to extend itself in order to help me perform my job to the best of my ability.

       1   2   3   4   5

2. The Army cares about my general satisfaction at work.

       1   2   3   4   5

3. The Army cares about my opinions.

       1   2   3   4   5

Which best describes your CURRENT career intentions? (Circle one option)

1. Definitely STAY IN until retirement.
2. Probably STAY IN until retirement.
3. Definitely STAY IN beyond my present obligation, but not necessarily until retirement.
4. UNDECIDED about whether to stay after completion of my current obligation.
5. Probably LEAVE upon completion of my current obligation.
6. Definitely LEAVE upon completion of my current obligation.

Please indicate how strongly you agree or disagree with each of the following statements about your military job.

1. I am an important part of my platoon.

   Strongly Disagree   Strongly Agree
        1   2   3   4   5

2. How well I do in my job matters a great deal to me.

   Strongly Disagree   Strongly Agree
        1   2   3   4   5

3. My job is very challenging.

   Strongly Disagree   Strongly Agree
        1   2   3   4   5

4. I strive as hard as I can to be successful in my work.

   Strongly Disagree   Strongly Agree
        1   2   3   4   5

5. I feel that what I am doing is important for accomplishing my platoon's mission.

   Strongly Disagree   Strongly Agree
        1   2   3   4   5

6. I am making a real contribution to accomplishing my platoon's mission.

   Strongly Disagree   Strongly Agree
        2   2   3   4   5

The following statements represent possible feelings that you might have about the Army. Please indicate the degree to which you disagree or agree with each statement.

| 1 | 2 | 3 | 4 | 5 |

Strongly Disagree   Strongly Agree

1. I do not feel like 'part of the family' in the Army.

| 1 | 2 | 3 | 4 | 5 |

2. I do not feel 'emotionally attached' to the Army.

| 1 | 2 | 3 | 4 | 5 |

3. The Army has a great deal of personal meaning for me.

| 1 | 2 | 3 | 4 | 5 |

4. I feel a strong sense of belonging to the Army.

| 1 | 2 | 3 | 4 | 5 |

Describe how likely it is that the following situations will occur in your platoon in the future.

Members of my platoon:	Very unlikely	Rather unlikely	Rather likely	Very likely
1. Obey rules and regulations even when no one is watching.	1	2	3	4
2. Focus on what's positive, rather than on the negative side.	1	2	3	4
3. Perform duties that are not mandatory, but are considered important.	1	2	3	4
4. Are mindful of how their behavior affects other people.	1	2	3	4
5. Are ready to lend a helping hand to those around them.	1	2	3	4

Please indicate to which extent you agree with the following statements.

| 1 | 2 | 3 | 4 | 5 |

Strongly Disagree   Strongly Agree

1. It is right for a platoon to socially reject its poorly performing members

2. It is right for a platoon to commit time to help its poorly performing members.

Describe how likely it is that the following situations will occur in your platoon in the future.

Members of my platoon:	Very unlikely	Rather unlikely	Rather likely	Very likely
1. Behave in an unpleasant manner toward other platoon members.	1	2	3	4
2. Try to harm a platoon member.	1	2	3	4
3. Criticize a platoon member's opinion or suggestion.	1	2	3	4
4. Exclude a platoon member from a conversation.	1	2	3	4
5. Try to avoid interacting with platoon members.	1	2	3	4
6. Speak poorly about other platoon members.	1	2	3	4

The statements below are about your experience in the Army. Please read each statement and describe how much you agree or disagree by circling the number that best fits your answer.

		strongly disagree					strongly agree
1	It is acceptable to go on sick call for minor medical problems that I could handle myself.	1	2	3	4	5	6
2	It is acceptable to seek medical care in order to avoid duties that are difficult, unpleasant, or dangerous.	1	2	3	4	5	6

Please answer the following questions about your health.

    1 Overall, how would you rate your physical health during the **past work week**.

                Excellent

                Very good

                Good

                Fair

                Poor

    2 Overall, how would you rate your emotional health during the **past work week**?

                Excellent

                Very good

                Good

                Fair

                Poor

1. How much <u>bodily</u> pain have you had during the <u>past work week</u>?

○ 1. None

○ 2. Very Mild

○ 3. Mild

○ 4. Moderate

○ 5. Severe

○ 6. Very severe

2. During the <u>past work week</u>, how much did <u>pain</u> interfere with your normal work?

○ 1. Not at all

○ 2. A little bit

○ 3. Moderately

○ 4. Quite a bit

○ 5. Extremely

These questions are about how you feel and how things have been with you **during the past work week**. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the **past work week** . . .

	None of the time	A little the time	Some of the time	A good bit of the time	Most of of the time	All of the time
1. Did you feel full of pep?	1	2	3	4	5	6
2. Did you have a lot of energy?	1	2	3	4	5	6
3. Did you feel worn out?	1	2	3	4	5	6
4. Did you feel tired?	1	2	3	4	5	6

Over the last work week, how often were you bothered by …

1. Little interest or pleasure in doing things.
2. Feeling down, depressed, or hopeless.
3. Trouble falling or staying asleep, or sleeping too much.
4. Feeling tired or having little energy.
5. Poor appetite or overeating.
6. Feeling bad about yourself -- or that you are a failure or have let yourself or your family down.
7. Trouble concentrating on things, such as reading the newspaper or watching television.
8. Moving or speaking so slowly that other people could have noticed. Or the opposite -- being so fidgety or restless that you have been moving around a lot more than usual.
9. Thoughts that you would be better off dead, or of hurting yourself in some way.

Response format:

Not at all

Some days

More than half the days

Nearly every day

Have you ever had any experience that was so frightening, horrible, or upsetting that, IN THE PAST MONTH, you...

NO   YES

○   ○   1. Have had any nightmares about it or thought about it when you did not want to?

○   ○   2. Tried hard not to think about it or went out of your way to avoid situations that

remind you of it?

○   ○   3. Were constantly on guard, watchful, or easily startled?

○   ○   4. Felt numb or detached from others, activities, or your surroundings?

PTSD Checklist – Military Version (PCL-M)

Name: _____ Unit: _____

Best contact number and/or email: _____

Deployed location: _____

Instructions: Below is a list of problems and complaints that veterans sometimes have in response to a stressful military experience. Please read each one carefully, put an "X" in the box.

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1.	Repeated, disturbing *memories, thoughts, or images* of a stressful military experience?					
2.	Repeated, disturbing *dreams* of a stressful military experience?					
3.	Suddenly *acting* or *feeling* as if a stressful military experience *were happening again* (as if you were reliving it)?					
4.	Feeling *very upset* when *something reminded* you of a stressful military experience?					
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, or sweating) when *something reminded* you of a stressful military experience?					
6.	Avoid *thinking about* or *talking about* a stressful military experience or avoid *having feelings* related to it?					
7.	Avoid *activities* or *talking about* a stressful military experience or avoid *having feelings* related to it?					
8.	Trouble *remembering important parts* of a stressful military experience?					
9.	Loss of *interest* in things that you used to enjoy?					
10.	Feeling *distant* or *cut off* from other people?					
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?					
12.	Feeling as if your *future* will somehow be *cut short?*					
13.	Trouble *falling* or *staying* asleep?					
14.	Feeling *irritable* or having *angry outbursts?*					
15.	Having *difficulty* concentrating?					
16.	Being "*super alert*" or watchful on guard?					
17.	Feeling *jumpy* or easily startled?					

Has anyone indicated that you've changed since the stressful military experience? Yes __ No__

All things considered, how satisfied are you with your life as a whole?

0	1	2	3	4	5	6	7	8	9	10
totally dissatisfied										totally satisfied

Rate the extent to which you agree or disagree with the following statements:

		Strongly Disagree				Strongly Agree
1.	I deal with stress better because of this deployment	1	2	3	4	5
2.	This deployment has made me more confident in my abilities	1	2	3	4	5
3.	This deployment improved cohesion in my squad	1	2	3	4	5
4.	I feel pride from my accomplishments during this deployment	1	2	3	4	5
5.	I was able to demonstrate my courage	1	2	3	4	5
6.	Overall, this deployment has had a positive effect on my life	1	2	3	4	5

The next two questions are about alcohol consumption. Please answer honestly; your responses are confidential.

1. In the PAST 2 WEEKS, have you used alcohol more than you meant to?

   Yes or No

2. In the PAST 2 WEEKS, have you felt you wanted or needed to cut down on your drinking?

   Yes or No

Overall, how satisfied are you with the SAAT training?

1 = not at all

5 = very much

Afghanistan Comprehension Questions

1) The _____ is the boundary between Afghanistan and Pakistan. It was established by Britain and does not reflect the actual homelands of the area's tribes. This boundary divides the homeland of the _____ ethnic group.

A) Durand Line; Pashtun
B) Silk Road; Tajik
C) Durrani Line; Pashtun
D) Durand Line; Tajik

Answer: A

2) What are the pillars of Islam?
A) Declaration of faith, prayer, charity, fasting, and pilgrimage to Mecca
B) Declaration of faith, prayer, charity, fasting, and modesty
C) Prayer, charity, fasting, modesty, and pilgrimage to Mecca
D) Prayer, charity, fasting, modesty, and bravery

Answer: A

3) Which principle underlies all the pillars of Pashtunwali?
A) Sunnah
B) Purdah
C) Honor
D) Charity

Answer: C

4) Which of the following is a reason for why Afghanistan ranks so poorly on health measures?

A) Most of Afghanistan's hospitals are in rural areas.
B) Afghan parents are suspicious of vaccinations and don't want their children vaccinated.
C) Medical personnel in Afghanistan are not respected and are paid small salaries.
D) Social barriers often prevent women from visiting healthcare providers.

Answer: D

5) _____ are tribal assemblies commonly held in Afghanistan. They are traditionally composed of male elders from the community and are essential to the way that Afghan communities make decisions.

A) Aqiqahs
B) Jirgas
C) Ulamas
D) Sharias

Answer: B

Note: These items are scattered throughout the survey. The response format is the same as the adjacent items in the survey. The following items are examples.

1. To help us monitor the quality of the data you're giving us, please select the option "agree completely".

2. To help us monitor the quality of the data you're giving us, please select the option "very unlikely".

3. To help us monitor the quality of the data you're giving us, please select the option "disagree somewhat".

Note: These items are examples. Refer to the occasion-specific overview spreadsheet for the correct response option.